USER MANUAL

DIR-825

VERSION 1.10

D-Link®

WIRELESS

Preface

D-Link reserves the right to revise this publication and to make changes in the content hereof without obligation to notify any person or organization of such revisions or changes.

Manual Revisions

Revision	Date	Description
1.01	September 18, 2008	Added IPV6 support Added SharePort support
1.10	September 16, 2009	Added Advanced DNS and CAPYCHA

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Package Contents

D-Link DIR-825 Xtreme N™ Dual Band Gigabit Router	
Power Adapter	
Ethernet Cable	
CD-ROM	
Stand	

Note: Using a power supply with a different voltage rating than the one included with the DIR-825 will cause damage and void the warranty for this product.

System Requirements

Network Requirements	• An Ethernet-based Cable or DSL modem • IEEE 802.11n-draft or 802.11g wireless clients • IEEE 802.11a wireless clients • 10/100/1000 Ethernet
Web-based Configuration Utility Requirements	**Computer with the following:** • Windows®, Macintosh, or Linux-based operating system • An installed Ethernet adapter **Browser Requirements:** • Internet Explorer 7.0 or higher • Firefox 2.0 or higher **Windows® Users:** Make sure you have the latest version of Java installed. Visit www.java.com to download the latest version.
CD Installation Wizard Requirements	**Computer with the following:** • Windows® XP with Service Pack 2 or Vista® • An installed Ethernet adapter • CD-ROM drive

Introduction

TOTAL PERFORMANCE
Combines award winning router features and IEEE 802.11a/g/Draft 802.11n wireless technology to provide the best wireless performance.

TOTAL SECURITY
The most complete set of security features including Active Firewall and WPA/WPA2 to protect your network against outside intruders.

TOTAL COVERAGE
Provides greater wireless signal rates even at farther distances for best-in-class Whole Home Coverage.

ULTIMATE PERFORMANCE
The D-Link Xtreme N™ Dual Band Gigabit Router (DIR-825) is a draft 802.11n/802.11a compliant device that delivers real world performance of up to 14x faster than an 802.11g wireless connection (also faster than a 100Mbps wired Ethernet connection). Create a secure wireless network to share photos, files, music, video, printers, and network storage throughout your home. Connect the DIR-825 router to a cable or DSL modem and share your high-speed Internet access with everyone on the network. In addition, this Router includes a Quality of Service (QoS) engine that keeps digital phone calls (VoIP) and online gaming smooth and responsive, providing a better Internet experience.

EXTENDED WHOLE HOME COVERAGE
Powered by Xtreme N™ Duo™ technology, this high performance router provides superior Whole Home Coverage while reducing dead spots. The router is designed for use in bigger homes and for users who demand higher performance networking. Add a Xtreme N™ notebook or desktop adapter and stay connected to your network from virtually anywhere in your home.

TOTAL NETWORK SECURITY
The Xtreme N™ router supports all of the latest wireless security features to prevent unauthorized access, be it from over the wireless network or from the Internet. Support for WPA/WPA2 standards ensure that you'll be able to use the best possible encryption method, regardless of your client devices. In addition, this router utilizes dual active firewalls (SPI and NAT) to prevent potential attacks from across the Internet.

* Maximum wireless signal rate derived from IEEE Standard 802.11a, 802.11g and Draft 802.11n specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. Environmental conditions will adversely affect wireless signal range.

Features

- **Faster Wireless Networking** - The DIR-825 provides up to 300Mbps* wireless connection with other 802.11n wireless clients. This capability allows users to participate in real-time activities online, such as video streaming, online gaming, and real-time audio. The performance of this 802.11n wireless router gives you the freedom of wireless networking at speeds 650% faster than 802.11g.

- **Compatible with 802.11a/g Devices** - The DIR-825 is still fully compatible with the IEEE 802.11g and 802.11a standards, so it can connect with existing 802.11g and 802.11a PCI, USB, and Cardbus adapters.

- **Advanced Firewall Features** - The Web-based user interface displays a number of advanced network management features including:

    - **Content Filtering** - Easily applied content filtering based on MAC Address, URL, and/or Domain Name.

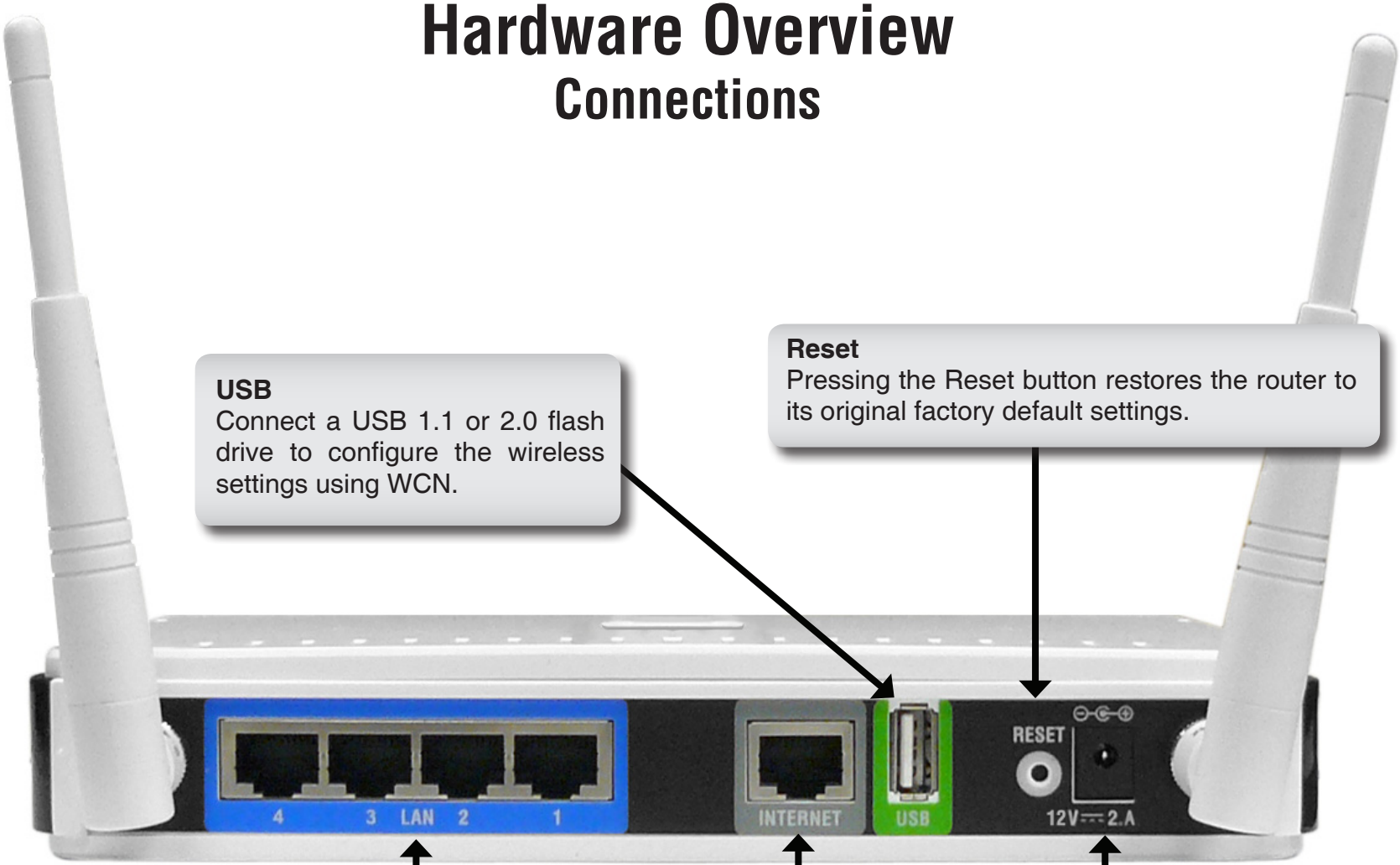
    - **Filter Scheduling** - These filters can be scheduled to be active on certain days or for a duration of hours or minutes.

    - **Secure Multiple/Concurrent Sessions** - The DIR-825 can pass through VPN sessions. It supports multiple and concurrent IPSec and PPTP sessions, so users behind the DIR-825 can securely access corporate networks.

- **User-friendly Setup Wizard** - Through its easy-to-use Web-based user interface, the DIR-825 lets you control what information is accessible to those on the wireless network, whether from the Internet or from your company's server. Configure your router to your specific settings within minutes.

* Maximum wireless signal rate derived from IEEE Standard 802.11g, 802.11a, and Draft 802.11n specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. Environmental conditions will adversely affect wireless signal range.

Hardware Overview
Connections



USB
Connect a USB 1.1 or 2.0 flash drive to configure the wireless settings using WCN.

Reset
Pressing the Reset button restores the router to its original factory default settings.

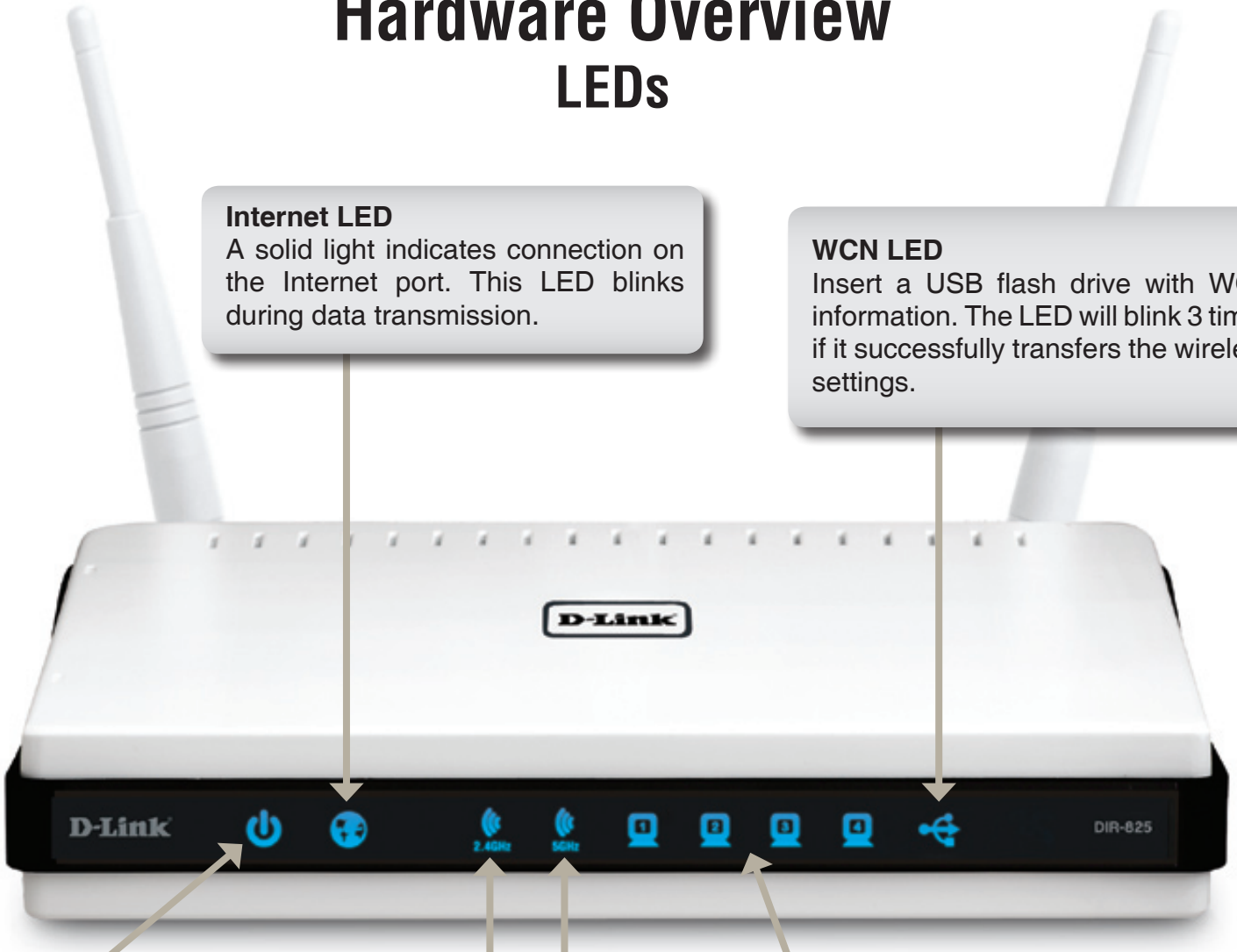
Gigabit LAN Ports (1-4)
Connect Ethernet devices such as computers, switches, and hubs.

Internet Port
The auto MDI/MDIX Internet port is the connection for the Ethernet cable to the cable or DSL modem.

Power Receptor
Receptor for the supplied power adapter.

Hardware Overview

LEDs



Internet LED
A solid light indicates connection on the Internet port. This LED blinks during data transmission.

WCN LED
Insert a USB flash drive with WCN information. The LED will blink 3 times if it successfully transfers the wireless settings.

Power LED
A solid light indicates a proper connection to the power supply.

WLAN LED
A solid light indicates that the wireless segment is ready. This LED blinks during wireless data transmission.

Local Network LEDs
A solid light indicates a connection to an Ethernet-enabled computer on ports 1-4. This LED blinks during data transmission.

Installation

This section will walk you through the installation process. Placement of the router is very important. Do not place the router in an enclosed area such as a closet, cabinet, or in the attic or garage.

Before you Begin

- Please configure the router with the computer that was last connected directly to your modem.
- You can only use the Ethernet port on your modem. If you were using the USB connection before using the router, then you must turn off your modem, disconnect the USB cable and connect an Ethernet cable to the Internet port on the router, and then turn the modem back on. In some cases, you may need to call your ISP to change connection types (USB to Ethernet).
- If you have DSL and are connecting via PPPoE, make sure you disable or uninstall any PPPoE software such as WinPoet, Broadjump, or Enternet 300 from your computer or you will not be able to connect to the Internet.
- When running the Setup Wizard from the D-Link CD, make sure the computer you are running the CD from is connected to the Internet and online or the wizard will not work. If you have disconnected any hardware, re-connect your computer back to the modem and make sure you are online.

Wireless Installation Considerations

The D-Link wireless router lets you access your network using a wireless connection from virtually anywhere within the operating range of your wireless network. Keep in mind, however, that the number, thickness and location of walls, ceilings, or other objects that the wireless signals must pass through, may limit the range. Typical ranges vary depending on the types of materials and background RF (radio frequency) noise in your home or business. The key to maximizing wireless range is to follow these basic guidelines:

1. Keep the number of walls and ceilings between the D-Link router and other network devices to a minimum - each wall or ceiling can reduce your adapter's range from 3-90 feet (1-30 meters.) Position your devices so that the number of walls or ceilings is minimized.

2. Be aware of the direct line between network devices. A wall that is 1.5 feet thick (.5 meters), at a 45-degree angle appears to be almost 3 feet (1 meter) thick. At a 2-degree angle it looks over 42 feet (14 meters) thick! Position devices so that the signal will travel straight through a wall or ceiling (instead of at an angle) for better reception.

3. Building Materials make a difference. A solid metal door or aluminum studs may have a negative effect on range. Try to position access points, wireless routers, and computers so that the signal passes through drywall or open doorways. Materials and objects such as glass, steel, metal, walls with insulation, water (fish tanks), mirrors, file cabinets, brick, and concrete will degrade your wireless signal.

4. Keep your product away (at least 3-6 feet or 1-2 meters) from electrical devices or appliances that generate RF noise.

5. If you are using 2.4GHz cordless phones or X-10 (wireless products such as ceiling fans, lights, and home security systems), your wireless connection may degrade dramatically or drop completely. Make sure your 2.4GHz phone base is as far away from your wireless devices as possible. The base transmits a signal even if the phone in not in use.

Connect to Cable/DSL/Satellite Modem

If you are connecting the router to a cable/DSL/satellite modem, please follow the steps below:

1. Place the router in an open and central location. Do not plug the power adapter into the router.

2. Turn the power off on your modem. If there is no on/off switch, then unplug the modem's power adapter. Shut down your computer.

3. Unplug the Ethernet cable (that connects your computer to your modem) from your computer and place it into the Internet port on the router.

4. Plug an Ethernet cable into one of the four LAN ports on the router. Plug the other end into the Ethernet port on your computer.

5. Turn on or plug in your modem. Wait for the modem to boot (about 30 seconds).

6. Plug the power adapter to the router and connect to an outlet or power strip. Wait about 30 seconds for the router to boot.

7. Turn on your computer.

8. Refer to page 12 to configure your router.

Connect to Another Router

If you are connecting the D-Link router to another router to use as a wireless access point and/or switch, you will have to do the following before connecting the router to your network:

- Disable UPnP™
- Disable DHCP
- Change the LAN IP address to an available address on your network. The LAN ports on the router cannot accept a DHCP address from your other router.

To connect to another router, please follow the steps below:

1. Plug the power into the router. Connect one of your computers to the router (LAN port) using an Ethernet cable. Make sure your IP address on the computer is 192.168.0.xxx (where xxx is between 2 and 254). Please see the **Networking Basics** section for more information. If you need to change the settings, write down your existing settings before making any changes. In most cases, your computer should be set to receive an IP address automatically in which case you will not have to do anything to your computer.

2. Open a web browser and enter **http://192.168.0.1** and press **Enter**. When the login window appears, set the user name to **Admin** and leave the password box empty. Click **Log In** to continue.

3. Click on **Advanced** and then click **Advanced Network**. Uncheck the **Enable UPnP** checkbox. Click **Save Settings** to continue.

4. Click **Setup** and then click **Network Settings**. Uncheck the **Enable DHCP Server** checkbox. Click **Save Settings** to continue.

5. Under Router Settings, enter an available IP address and the subnet mask of your network. Click **Save Settings** to save your settings. Use this new IP address to access the configuration utility of the router in the future. Close the browser and change your computer's IP settings back to the original values as in Step 1.

6. Disconnect the Ethernet cable from the router and reconnect your computer to your network.

7. Connect an Ethernet cable in one of the **LAN** ports of the router and connect it to your other router. Do not plug anything into the Internet (WAN) port of the D-Link router.

8. You may now use the other 3 LAN ports to connect other Ethernet devices and computers. To configure your wireless network, open a web browser and enter the IP address you assigned to the router. Refer to the **Configuration** and **Wireless Security** sections for more information on setting up your wireless network.

Getting Started

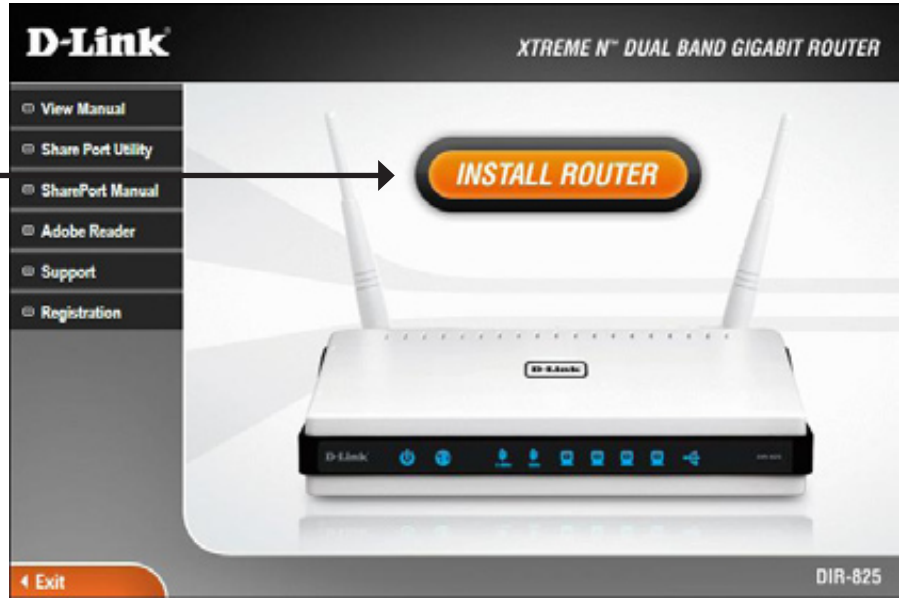
The DIR-825 includes a Quick Router Setup Wizard CD. Follow the simple steps below to run the Setup Wizard to guide you quickly through the installation process.

Insert the **Quick Router Setup Wizard CD** in the CD-ROM drive. The step-by-step instructions that follow are shown in Windows® XP. The steps and screens are similar for the other Windows operating systems.

If the CD Autorun function does not automatically start on your computer, go to **Start** > **Run**. In the run box type "**D:\DIR825.exe**" (where ***D:*** represents the drive letter of your CD-ROM drive).

When the autorun screen appears, click **Install Router.**

Click **Install Router**



Note: *It is recommended to write down the SSID and Security Key, followed by the login password on the provided CD holder.*

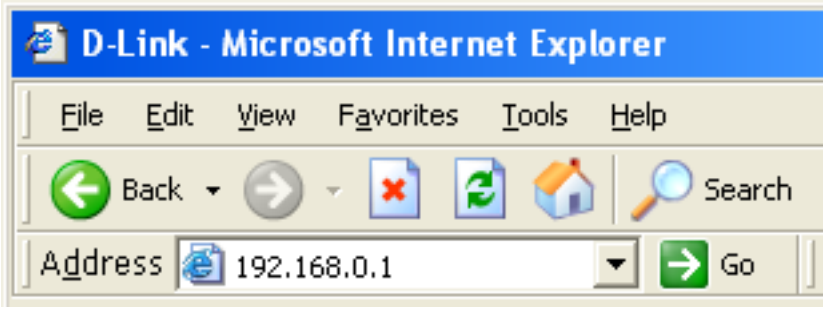
Configuration

This section will show you how to configure your new D-Link wireless router using the web-based configuration utility.

Web-based Configuration Utility

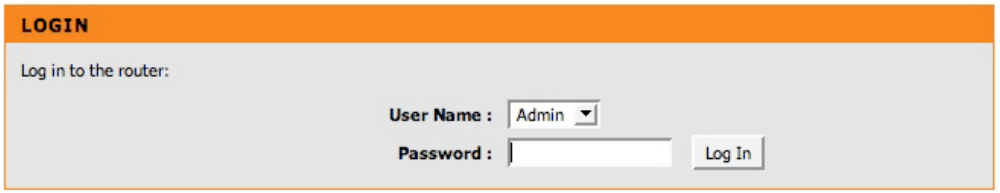
To access the configuration utility, open a web-browser such as Internet Explorer and enter the IP address of the router (192.168.0.1).

You may also connect using the NetBIOS name in the address bar (**http://dlinkrouter**).



Select **Admin** from the drop-down menu and then enter your password. Leave the password blank by default.

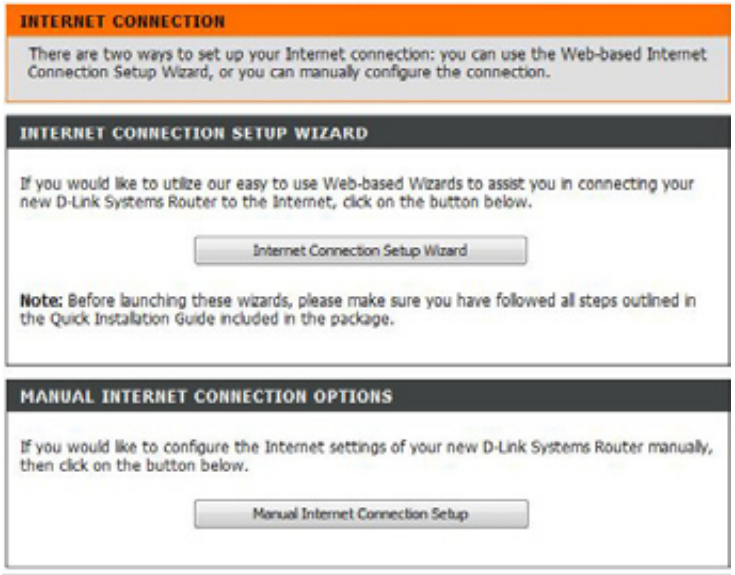
If you get a **Page Cannot be Displayed** error, please refer to the **Troubleshooting** section for assistance.



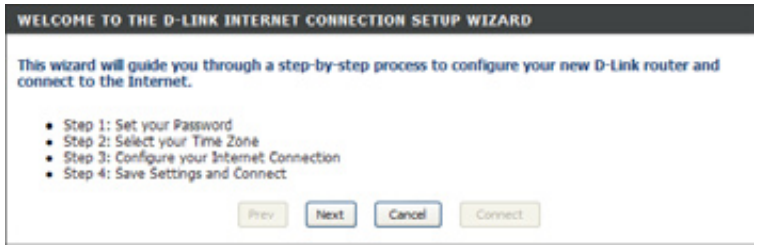
Setup Wizard

Click **Launch Internet Connection Setup Wizard** to begin.

If you want to enter your settings without running the wizard, click **Manual Configuration** and skip to page 18.


INTERNET CONNECTION
There are two ways to set up your Internet connection: you can use the Web-based Internet Connection Setup Wizard, or you can manually configure the connection.
INTERNET CONNECTION SETUP WIZARD
If you would like to utilize our easy to use Web-based Wizards to assist you in connecting your new D-Link Systems Router to the Internet, click on the button below.
Internet Connection Setup Wizard
Note: Before launching these wizards, please make sure you have followed all steps outlined in the Quick Installation Guide included in the package.
MANUAL INTERNET CONNECTION OPTIONS
If you would like to configure the Internet settings of your new D-Link Systems Router manually, then click on the button below.
Manual Internet Connection Setup

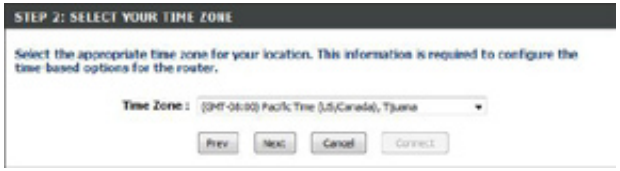
Click **Next** to continue.


WELCOME TO THE D-LINK INTERNET CONNECTION SETUP WIZARD
This wizard will guide you through a step-by-step process to configure your new D-Link router and connect to the Internet.
Step 1: Set your Password
Step 2: Select your Time Zone
Step 3: Configure your Internet Connection
Step 4: Save Settings and Connect
Prev
Next
Cancel
Connect

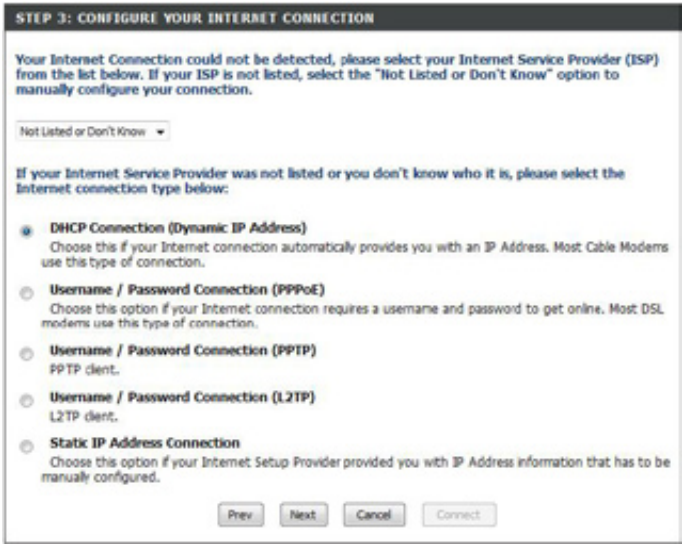
Create a new password and then click **Next** to continue.

STEP 1: SET YOUR PASSWORD
By default, your new D-Link Router does not have a password configured for administrator access to the Web-based configuration pages. To secure your new networking device, please set and verify a password below:
Password :
Verify Password :
Prev
Next
Cancel
Connect

Select your time zone from the drop-down menu and then click **Next** to continue.


STEP 2: SELECT YOUR TIME ZONE
Select the appropriate time zone for your location. This information is required to configure the time based options for the router.
Time Zone :
Prev
Next
Cancel
Connect

Select the type of Internet connection you use and then click **Next** to continue.


STEP 3: CONFIGURE YOUR INTERNET CONNECTION
Your Internet Connection could not be detected, please select your Internet Service Provider (ISP) from the list below. If your ISP is not listed, select the "Not Listed or Don't Know" option to manually configure your connection.
Not Listed or Don't Know
If your Internet Service Provider was not listed or you don't know who it is, please select the Internet connection type below:
DHCP Connection (Dynamic IP Address)
Choose this if your Internet connection automatically provides you with an IP Address. Most Cable Modems use this type of connection.
Username / Password Connection (PPPoE)
Choose this option if your Internet connection requires a username and password to get online. Most DSL modems use this type of connection.
Username / Password Connection (PPTP)
PPTP client.
Username / Password Connection (L2TP)
L2TP client.
Static IP Address Connection
Choose this option if your Internet Setup Provider provided you with IP Address information that has to be manually configured.
Prev
Next
Cancel
Connect

If you selected **Dynamic**, you may need to enter the MAC address of the computer that was last connected directly to your modem. If you are currently using that computer, click **Clone Your PC's MAC Address** and then click **Next** to continue.

The Host Name is optional but may be required by some ISPs. The default host name is the device name of the router and may be changed.

DHCP CONNECTION (DYNAMIC IP ADDRESS)
To set up this connection, please make sure that you are connected to the D-Link Router with the PC that was originally connected to your broadband connection. If you are, then click the Clone MAC button to copy your computer's MAC Address to the D-Link Router.
MAC Address :
00:00:00:00:00:00
(optional)
Clone Your PC's MAC Address
Host Name :
Note: You may also need to provide a Host Name. If you do not have or know this information, please contact your ISP.
DNS SETTINGS
Primary DNS Address :
0.0.0.0
Secondary DNS Address :
0.0.0.0
Prev
Next
Cancel
Connect

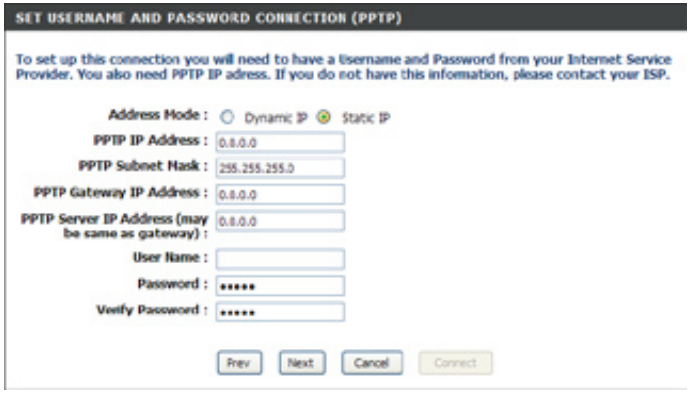
If you selected **PPPoE**, enter your PPPoE username and password. Click **Next** to continue.

SET USERNAME AND PASSWORD CONNECTION (PPPOE)
To set up this connection you will need to have a Username and Password from your Internet Service Provider. If you do not have this information, please contact your ISP.
Address Mode : Dynamic IP Static IP
IP Address :
User Name :
Password :
Verify Password :
Service Name : (optional)
Note: You may also need to provide a Service Name. If you do not have or know this information, please contact your ISP.
Prev
Next
Cancel
Connect

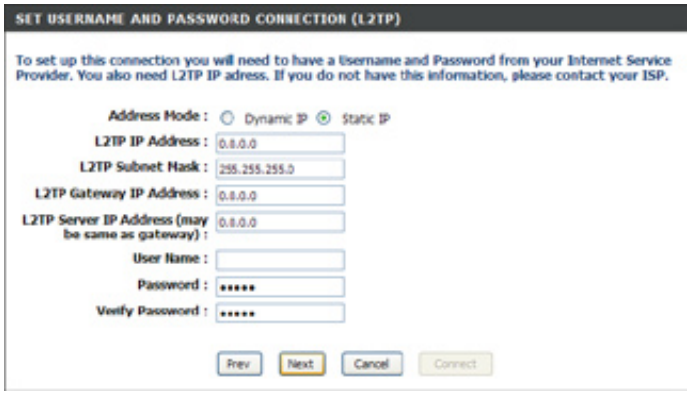
Select **Static** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses.

Note: *Make sure to remove your PPPoE software from your computer. The software is no longer needed and will not work through a router.*

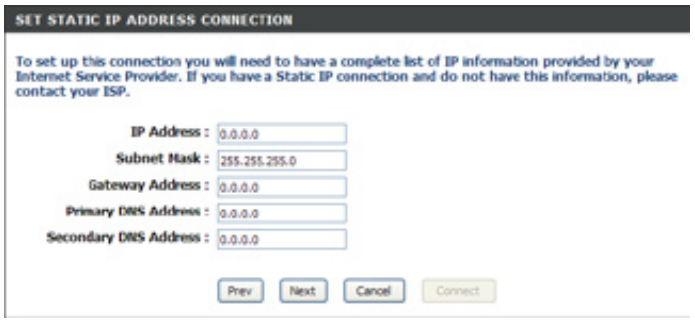
If you selected **PPTP**, enter your PPTP username and password. Click **Next** to continue.


SET USERNAME AND PASSWORD CONNECTION (PPTP)
To set up this connection you will need to have a Username and Password from your Internet Service Provider. You also need PPTP IP adress. If you do not have this information, please contact your ISP.
Address Mode : Dynamic IP Static IP
PPTP IP Address : 0.0.0.0
PPTP Subnet Mask : 255.255.255.0
PPTP Gateway IP Address : 0.0.0.0
PPTP Server IP Address (may be same as gateway) : 0.0.0.0
User Name :
Password :
Verify Password :
Prev
Next
Cancel
Connect

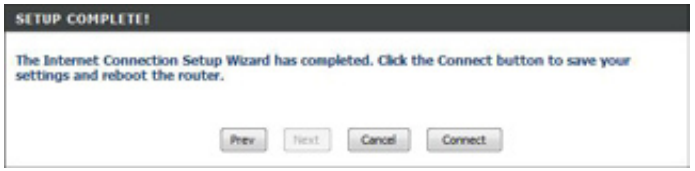
If you selected **L2TP**, enter your L2TP username and password. Click **Next** to continue.


SET USERNAME AND PASSWORD CONNECTION (L2TP)
To set up this connection you will need to have a Username and Password from your Internet Service Provider. You also need L2TP IP adress. If you do not have this information, please contact your ISP.
Address Mode : Dynamic IP Static IP
L2TP IP Address : 0.0.0.0
L2TP Subnet Mask : 255.255.255.0
L2TP Gateway IP Address : 0.0.0.0
L2TP Server IP Address (may be same as gateway) : 0.0.0.0
User Name :
Password :
Verify Password :
Prev
Next
Cancel
Connect

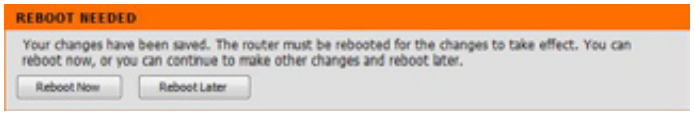
If you selected **Static**, enter your network settings supplied by your Internet provider. Click **Next** to continue.


SET STATIC IP ADDRESS CONNECTION
To set up this connection you will need to have a complete list of IP information provided by your Internet Service Provider. If you have a Static IP connection and do not have this information, please contact your ISP.
IP Address :
Subnet Mask :
Gateway Address :
Primary DNS Address :
Secondary DNS Address :
Prev
Next
Cancel
Connect

Click **Connect** to save your settings.


SETUP COMPLETE!
The Internet Connection Setup Wizard has completed. Click the Connect button to save your settings and reboot the router.
Prev
Next
Cancel
Connect

Click **Reboot Now** to reboot the router so the new settings can take effect. Once the router is finished rebooting, click **Continue**. Please allow 1-2 minutes to connect.

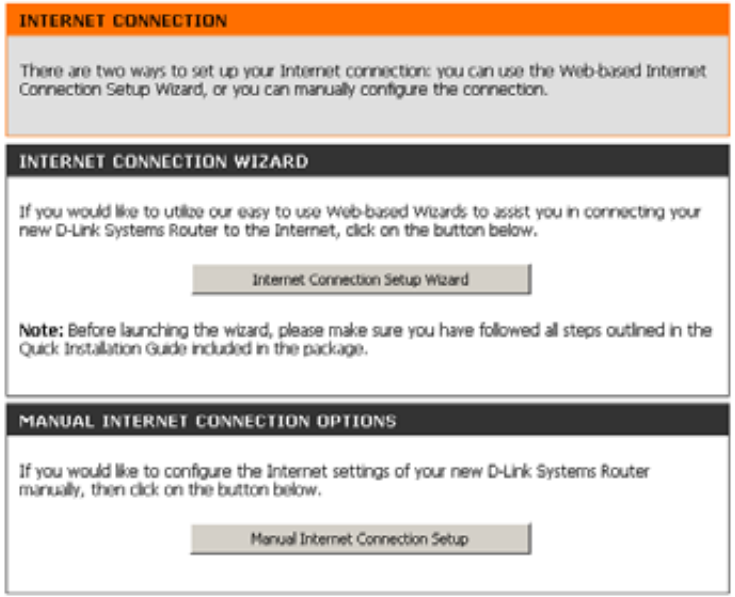

REBOOT NEEDED
Your changes have been saved. The router must be rebooted for the changes to take effect. You can reboot now, or you can continue to make other changes and reboot later.
Reboot Now
Reboot Later

Close your browser window and reopen it to test your Internet connection. It may take a few tries to initially connect to the Internet.

Manual Internet Connection Setup

Click **Manual Internet Connection Setup** to begin.

If you want to configure your router to connect to the Internet using the wizard, click **Internet Connection Setup Wizard** and refer to page 14.


INTERNET CONNECTION
There are two ways to set up your Internet connection: you can use the Web-based Internet Connection Setup Wizard, or you can manually configure the connection.
INTERNET CONNECTION WIZARD
If you would like to utilize our easy to use Web-based Wizards to assist you in connecting your new D-Link Systems Router to the Internet, click on the button below.
Internet Connection Setup Wizard
Note: Before launching the wizard, please make sure you have followed all steps outlined in the Quick Installation Guide included in the package.
MANUAL INTERNET CONNECTION OPTIONS
If you would like to configure the Internet settings of your new D-Link Systems Router manually, then click on the button below.
Manual Internet Connection Setup

Dynamic (Cable)

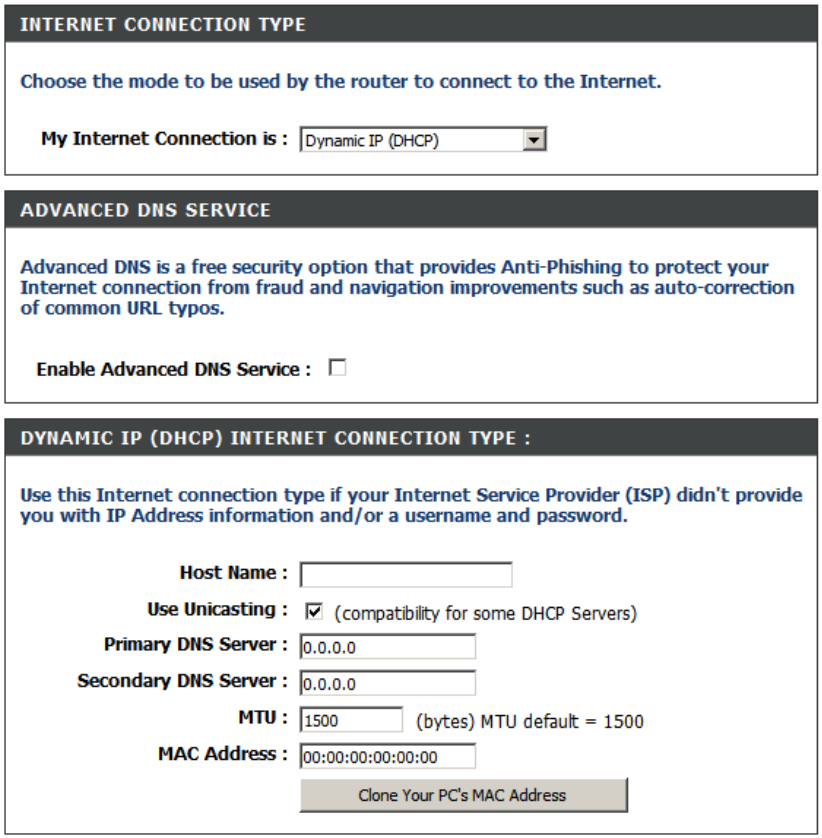
My Internet Connection: Select **Dynamic IP (DHCP)** to obtain IP Address information automatically from your ISP. Select this option if your ISP does not give you any IP numbers to use. This option is commonly used for cable modem services such as Comcast and Cox.

Enable Advanced DNS Service: Advanced Domain Name System (DNS) services enhances your Internet performance by getting you the information and web pages you are looking for faster and more reliably. In addition, it improves your overall Internet experience by correcting many common typo mistakes automatically, taking you where you intended to go and saving you valuable time. *Disclaimer: D-Link makes no warranty as to the availability, reliability, functionality and operation of the Advanced DNS service or its features.*

Host Name: The Host Name is optional but may be required by some ISPs. Leave blank if you are not sure.

Use Unicasting: Check the box if you are having problems obtaining an IP address from your ISP.

Primary/ Secondary DNS Server: Enter the Primary and secondary DNS server IP addresses assigned by your ISP. These addresses are usually obtained automatically from your ISP. Leave at 0.0.0.0 if you did not specifically receive these from your ISP.


INTERNET CONNECTION TYPE
Choose the mode to be used by the router to connect to the Internet.
My Internet Connection is :
Dynamic IP (DHCP)
ADVANCED DNS SERVICE
Advanced DNS is a free security option that provides Anti-Phishing to protect your Internet connection from fraud and navigation improvements such as auto-correction of common URL typos.
Enable Advanced DNS Service :
DYNAMIC IP (DHCP) INTERNET CONNECTION TYPE :
Use this Internet connection type if your Internet Service Provider (ISP) didn't provide you with IP Address information and/or a username and password.
Host Name :
Use Unicasting :
(compatibility for some DHCP Servers)
Primary DNS Server :
0.0.0.0
Secondary DNS Server :
0.0.0.0
MTU :
1500
(bytes) MTU default = 1500
MAC Address :
00:00:00:00:00:00
Clone Your PC's MAC Address

MTU: Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1500 is the default MTU.

MAC Address: The default MAC Address is set to the Internet port's physical interface MAC address on the Broadband Router. It is not recommended that you change the default MAC address unless required by your ISP. You can use the **Clone Your PC's MAC Address** button to replace the Internet port's MAC address with the MAC address of your Ethernet card.

Internet Setup
PPPoE (DSL)

Choose PPPoE (Point to Point Protocol over Ethernet) if your ISP uses a PPPoE connection. Your ISP will provide you with a username and password. This option is typically used for DSL services. Make sure to remove your PPPoE software from your computer. The software is no longer needed and will not work through a router.

My Internet Connection: Select **PPPoE (Username/Password)** from the drop-down menu.

Address Mode: Select **Static IP** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses. In most cases, select **Dynamic**.

IP Address: Enter the IP address (Static PPPoE only).

User Name: Enter your PPPoE user name.

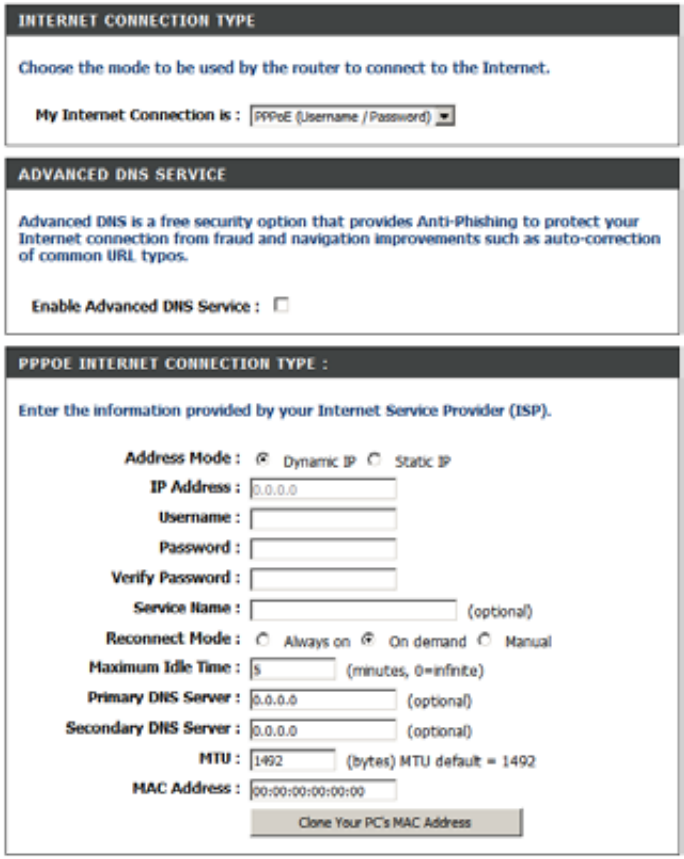
Password: Enter your PPPoE password and then retype the password in the next box.

Service Name: Enter the ISP Service Name (optional).

Reconnection Mode: Select either **Always-on**, **On-Demand**, or **Manual**.

Maximum Idle Time: Enter a maximum idle time during which the Internet connection is maintained during inactivity. To disable this feature, enable Auto-reconnect.

DNS Addresses: Enter the Primary and Secondary DNS Server Addresses (Static PPPoE only).


INTERNET CONNECTION TYPE
Choose the mode to be used by the router to connect to the Internet.
My Internet Connection is : PPPoE (Username / Password)
ADVANCED DNS SERVICE
Advanced DNS is a free security option that provides Anti-Phishing to protect your Internet connection from fraud and navigation improvements such as auto-correction of common URL typos.
Enable Advanced DNS Service :
PPPOE INTERNET CONNECTION TYPE :
Enter the information provided by your Internet Service Provider (ISP).
Address Mode : Dynamic IP Static IP
IP Address : 0.0.0.0
Username :
Password :
Verify Password :
Service Name : (optional)
Reconnect Mode : Always on On demand Manual
Maximum Idle Time : 5 (minutes, 0=infinite)
Primary DNS Server : 0.0.0.0 (optional)
Secondary DNS Server : 0.0.0.0 (optional)
MTU : 1492 (bytes) MTU default = 1492
MAC Address : 00:00:00:00:00:00
Clone Your PC's MAC Address

MTU: Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1492 is the default MTU.

MAC Address: The default MAC Address is set to the Internet port's physical interface MAC address on the Broadband Router. It is not recommended that you change the default MAC address unless required by your ISP. You can use the **Clone Your PC's MAC Address** button to replace the Internet port's MAC address with the MAC address of your Ethernet card.

Internet Setup
PPTP

Choose PPTP (Point-to-Point-Tunneling Protocol) if your ISP uses a PPTP connection. Your ISP will provide you with a username and password. This option is typically used for DSL services.

Address Mode: Select **Static** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses. In most cases, select **Dynamic**.

PPTP IP Address: Enter the IP address (Static PPTP only).

PPTP Subnet Mask: Enter the Primary and Secondary DNS Server Addresses (Static PPTP only).

PPTP Gateway: Enter the Gateway IP Address provided by your ISP.

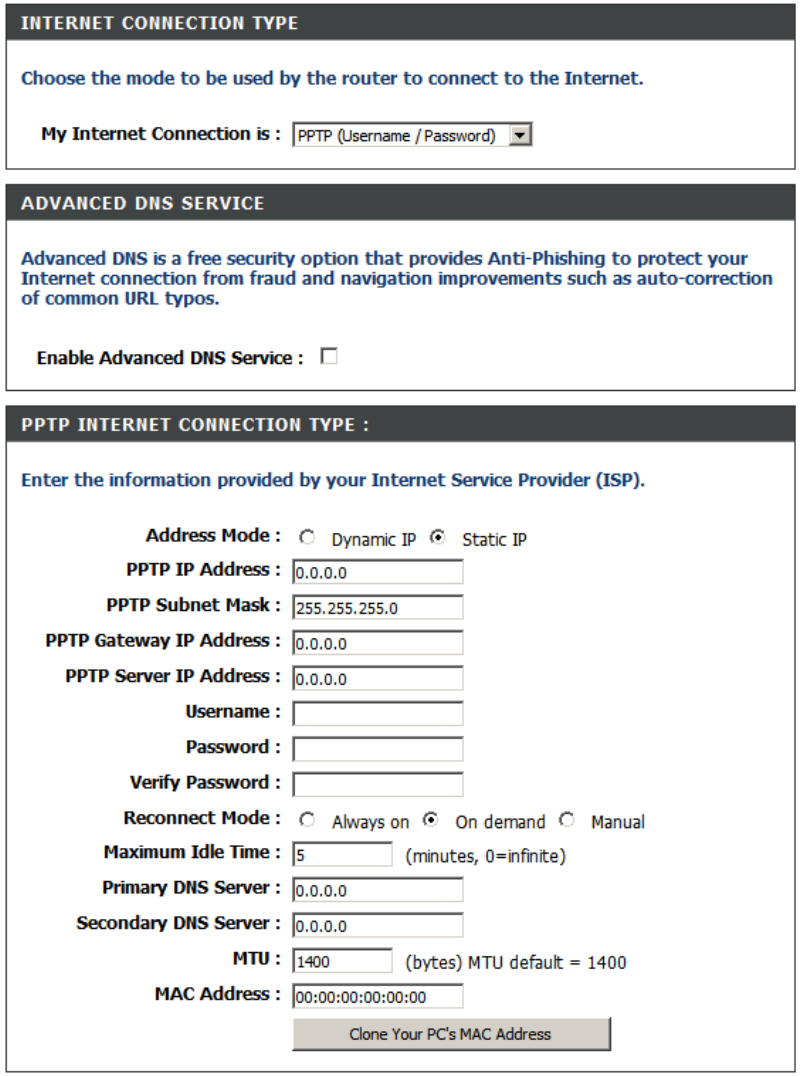
PPTP Server IP: Enter the Server IP provided by your ISP (optional).

Username: Enter your PPTP username.

Password: Enter your PPTP password and then retype the password in the next box.

Reconnect Mode: Select either **Always-on**, **On-Demand**, or **Manual**.

Maximum Idle Time: Enter a maximum idle time during which the Internet connection is maintained during inactivity. To disable this feature, enable Auto-reconnect.


INTERNET CONNECTION TYPE
Choose the mode to be used by the router to connect to the Internet.
My Internet Connection is : PPTP (Username / Password)
ADVANCED DNS SERVICE
Advanced DNS is a free security option that provides Anti-Phishing to protect your Internet connection from fraud and navigation improvements such as auto-correction of common URL typos.
Enable Advanced DNS Service :
PPTP INTERNET CONNECTION TYPE :
Enter the information provided by your Internet Service Provider (ISP).
Address Mode : Dynamic IP Static IP
PPTP IP Address : 0.0.0.0
PPTP Subnet Mask : 255.255.255.0
PPTP Gateway IP Address : 0.0.0.0
PPTP Server IP Address : 0.0.0.0
Username :
Password :
Verify Password :
Reconnect Mode : Always on On demand Manual
Maximum Idle Time : 5 (minutes, 0=infinite)
Primary DNS Server : 0.0.0.0
Secondary DNS Server : 0.0.0.0
MTU : 1400 (bytes) MTU default = 1400
MAC Address : 00:00:00:00:00:00
Clone Your PC's MAC Address

DNS Servers: The DNS server information will be supplied by your ISP (Internet Service Provider.)

MTU: Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1400 is the default MTU.

MAC Address: The default MAC Address is set to the Internet port's physical interface MAC address on the Broadband Router. It is not recommended that you change the default MAC address unless required by your ISP. You can use the **Clone Your PC's MAC Address** button to replace the Internet port's MAC address with the MAC address of your Ethernet card.

Internet Setup
L2TP

Choose L2TP (Layer 2 Tunneling Protocol) if your ISP uses a L2TP connection. Your ISP will provide you with a username and password. This option is typically used for DSL services.

Address Mode: Select **Static** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses. In most cases, select **Dynamic**.

L2TP IP Address: Enter the L2TP IP address supplied by your ISP (Static only).

L2TP Subnet Mask: Enter the Subnet Mask supplied by your ISP (Static only).

L2TP Gateway: Enter the Gateway IP Address provided by your ISP.

L2TP Server IP: Enter the Server IP provided by your ISP (optional).

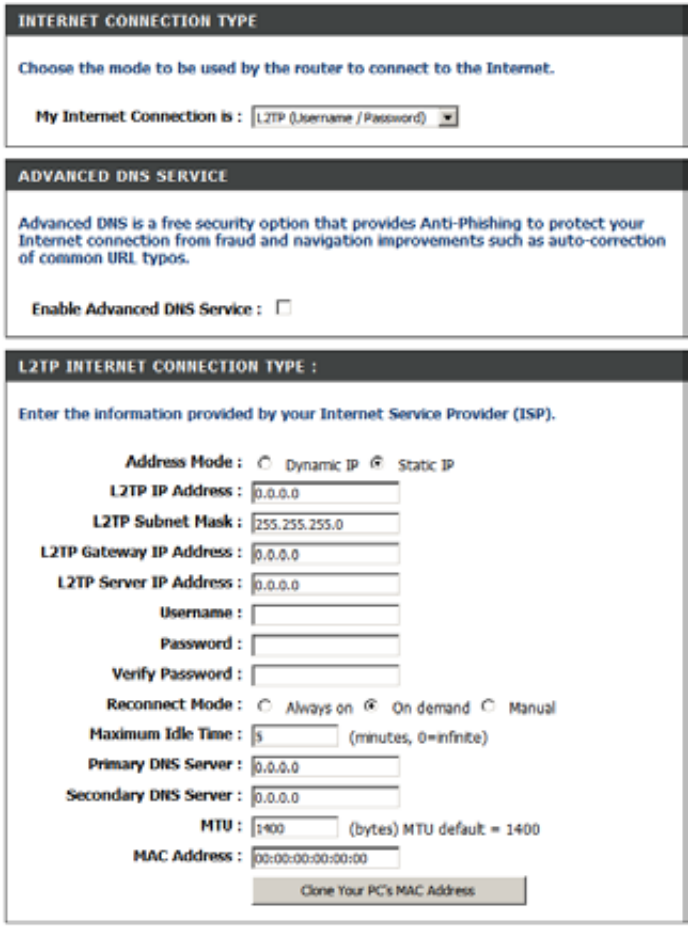
Username: Enter your L2TP username.

Password: Enter your L2TP password and then retype the password in the next box.

Reconnect Mode: Select either **Always-on**, **On-Demand**, or **Manual**.

Maximum Idle Time: Enter a maximum idle time during which the Internet connection is maintained during inactivity. To disable this feature, enable Auto-reconnect.

DNS Servers: Enter the Primary and Secondary DNS Server Addresses (Static L2TP only).


INTERNET CONNECTION TYPE
Choose the mode to be used by the router to connect to the Internet.
My Internet Connection is : L2TP (Username / Password)
ADVANCED DNS SERVICE
Advanced DNS is a free security option that provides Anti-Phishing to protect your Internet connection from fraud and navigation improvements such as auto-correction of common URL typos.
Enable Advanced DNS Service :
L2TP INTERNET CONNECTION TYPE :
Enter the information provided by your Internet Service Provider (ISP).
Address Mode : Dynamic IP Static IP
L2TP IP Address : 0.0.0.0
L2TP Subnet Mask : 255.255.255.0
L2TP Gateway IP Address : 0.0.0.0
L2TP Server IP Address : 0.0.0.0
Username :
Password :
Verify Password :
Reconnect Mode : Always on On demand Manual
Maximum Idle Time : 5 (minutes, 0=infinite)
Primary DNS Server : 0.0.0.0
Secondary DNS Server : 0.0.0.0
MTU : 1400 (bytes) MTU default = 1400
MAC Address : 00:00:00:00:00:00
Clone Your PC's MAC Address

MTU: Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1400 is the default MTU.

Clone MAC Address: The default MAC Address is set to the Internet port's physical interface MAC address on the Broadband Router. It is not recommended that you change the default MAC address unless required by your ISP. You can use the **Clone Your PC's MAC Address** button to replace the Internet port's MAC address with the MAC address of your Ethernet card.

Internet Setup
Static (assigned by ISP)

Select Static IP Address if all the Internet port's IP information is provided to you by your ISP. You will need to enter in the IP address, subnet mask, gateway address, and DNS address(es) provided to you by your ISP. Each IP address entered in the fields must be in the appropriate IP form, which are four octets separated by a dot (x.x.x.x). The Router will not accept the IP address if it is not in this format.

IP Address: Enter the IP address assigned by your ISP.

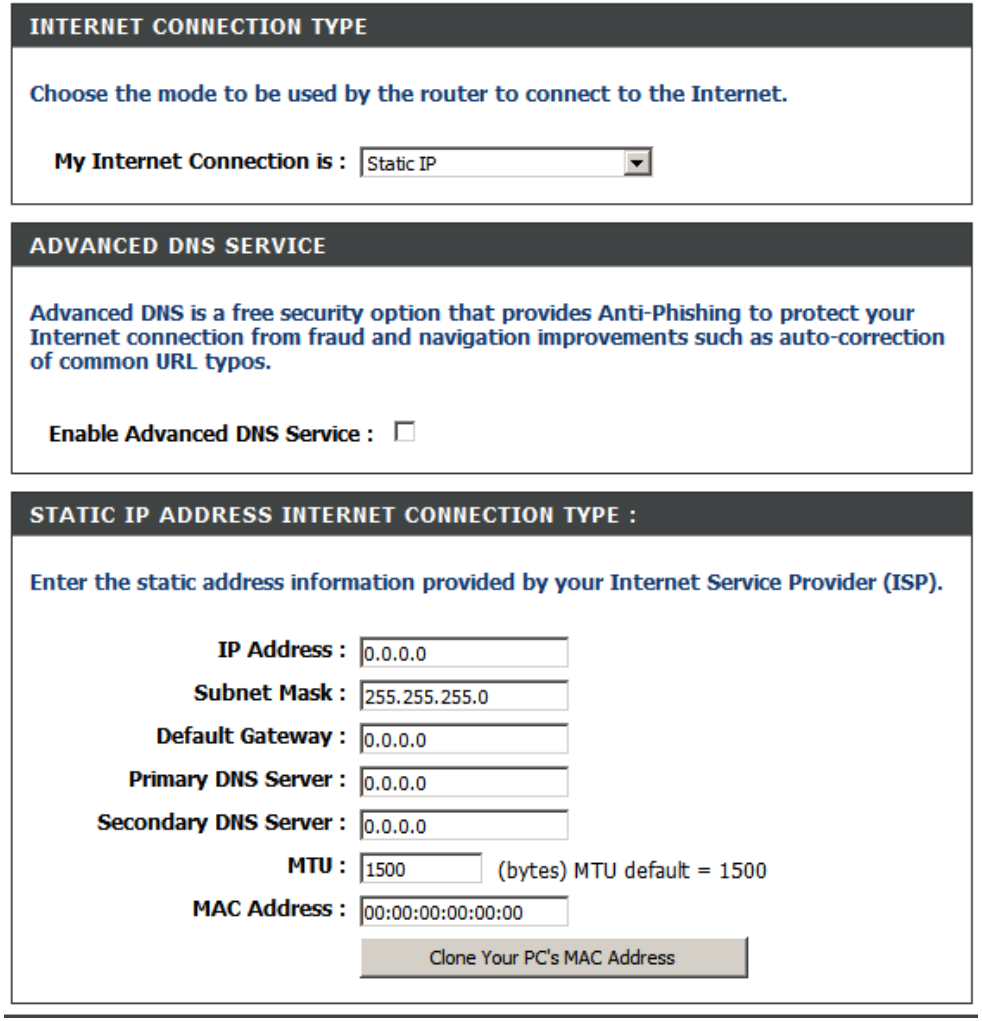
Subnet Mask: Enter the Subnet Mask assigned by your ISP.

Default Gateway: Enter the Gateway assigned by your ISP.

DNS Servers: The DNS server information will be supplied by your ISP (Internet Service Provider.)

MTU: Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1500 is the default MTU.

MAC Address: The default MAC Address is set to the Internet port's physical interface MAC address on the Broadband Router. It is not recommended that you change the default MAC address unless required by your ISP. You can use the **Clone Your PC's MAC Address** button to replace the Internet port's MAC address with the MAC address of your Ethernet card.


INTERNET CONNECTION TYPE
Choose the mode to be used by the router to connect to the Internet.
My Internet Connection is : Static IP
ADVANCED DNS SERVICE
Advanced DNS is a free security option that provides Anti-Phishing to protect your Internet connection from fraud and navigation improvements such as auto-correction of common URL typos.
Enable Advanced DNS Service :
STATIC IP ADDRESS INTERNET CONNECTION TYPE :
Enter the static address information provided by your Internet Service Provider (ISP).
IP Address : 0.0.0.0
Subnet Mask : 255.255.255.0
Default Gateway : 0.0.0.0
Primary DNS Server : 0.0.0.0
Secondary DNS Server : 0.0.0.0
MTU : 1500 (bytes) MTU default = 1500
MAC Address : 00:00:00:00:00:00
Clone Your PC's MAC Address

Internet Setup
3G Mobile Connection

If you want to connect your router to the Internet through a 3G mobile service, navigate to **USB SETTINGS** and select **SETUP.** The **USB SETTINGS** screen will display**.** Select **3G USB Adapter** from the **My Plug of USB type is** field and click **Save Settings**. The **INTERNET CONNECTION TYPE** screen will display as seen below:

Country: Select your country from the list.

ISP: Displays the name of your **Internet Service Provider** (ISP).

Username: Enter a username. This field is optional.

Password: Enter a password. This field is optional.

Dial Number: Enter the dial-up number.

Authentication Protocol: Choose the authentication type from the drop-down list. The default setting is **Auto**.

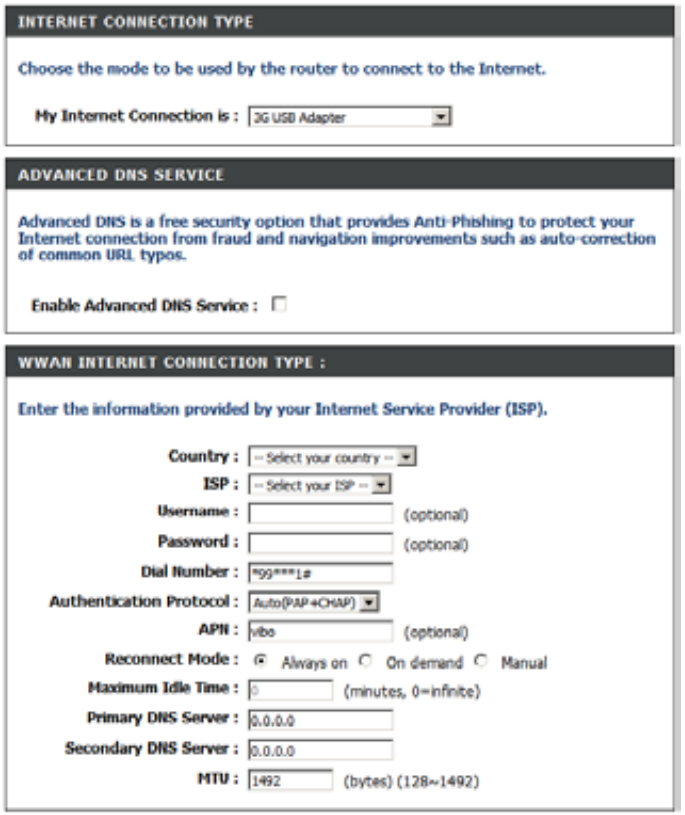
APN: Enter a name for the access point. This field is optional.

Reconnect Mode: Select **Always-on**, **On-Demand**, or **Manual**. to reconnect to the network.

Maximum Idle Time: Enter the maximum idle time during which the Internet connection is maintained during inactivity. This function does not apply if you have selected **Reconnect Mode** as **Always on**.

MTU:

You may need to change the **MTU** (Maximum Transmission Unit) for optimal performance with your specific ISP. 1492 is the default MTU value.

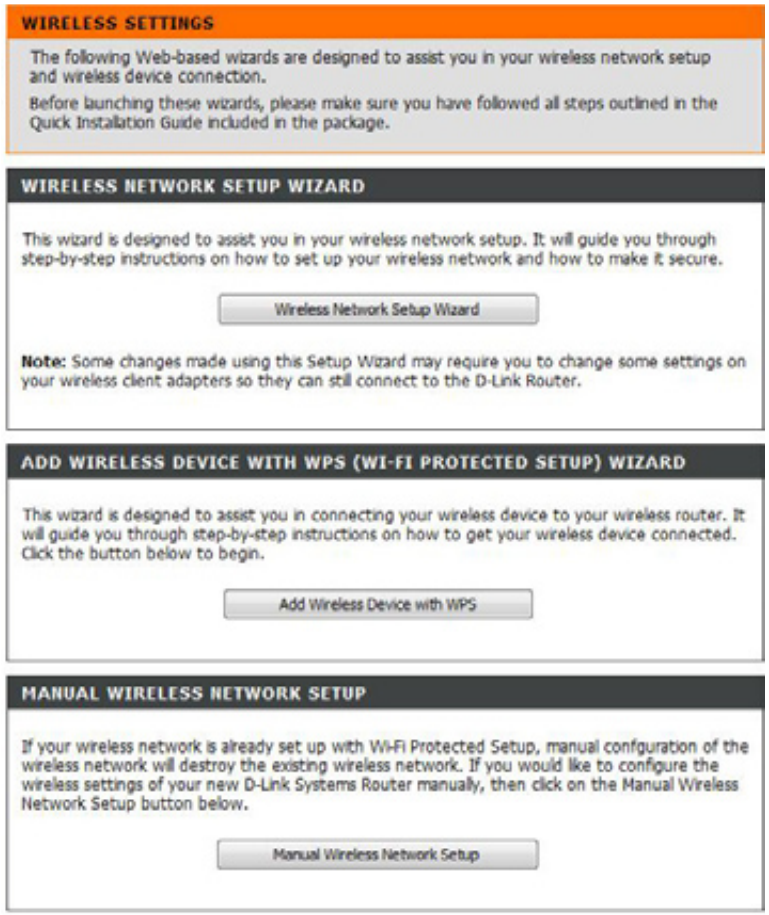

INTERNET CONNECTION TYPE
Choose the mode to be used by the router to connect to the Internet.
My Internet Connection is : 3G USB Adapter
ADVANCED DNS SERVICE
Advanced DNS is a free security option that provides Anti-Phishing to protect your Internet connection from fraud and navigation improvements such as auto-correction of common URL typos.
Enable Advanced DNS Service :
WWAN INTERNET CONNECTION TYPE :
Enter the information provided by your Internet Service Provider (ISP).
Country : -- Select your country --
ISP : -- Select your ISP --
Username : (optional)
Password : (optional)
Dial Number : *99***1#
Authentication Protocol : Auto(PAP+CHAP)
APN : vibo (optional)
Reconnect Mode : Always on On demand Manual
Maximum Idle Time : 0 (minutes, 0=infinite)
Primary DNS Server : 0.0.0.0
Secondary DNS Server : 0.0.0.0
MTU : 1492 (bytes) (128~1492)

Wireless Settings

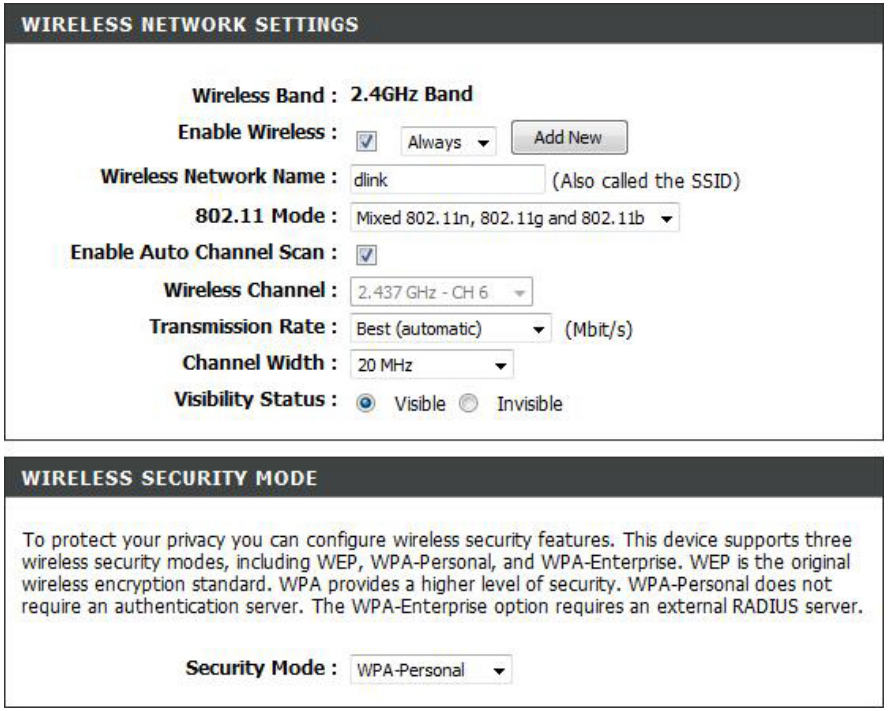
If you want to configure the wireless settings on your router using the wizard, click **Wireless Security Setup Wizard** and refer to page 84.

Click **Add Wireless Device with WPS** if you want to add a wireless device using Wi-Fi Protected Setup (WPS) and refer to page 86.

If you want to manually configure the wireless settings on your router click **Manual Wireless Network Setup** and refer to the next page.


WIRELESS SETTINGS
The following Web-based wizards are designed to assist you in your wireless network setup and wireless device connection.
Before launching these wizards, please make sure you have followed all steps outlined in the Quick Installation Guide included in the package.
WIRELESS NETWORK SETUP WIZARD
This wizard is designed to assist you in your wireless network setup. It will guide you through step-by-step instructions on how to set up your wireless network and how to make it secure.
Wireless Network Setup Wizard
Note: Some changes made using this Setup Wizard may require you to change some settings on your wireless client adapters so they can still connect to the D-Link Router.
ADD WIRELESS DEVICE WITH WPS (WI-FI PROTECTED SETUP) WIZARD
This wizard is designed to assist you in connecting your wireless device to your wireless router. It will guide you through step-by-step instructions on how to get your wireless device connected. Click the button below to begin.
Add Wireless Device with WPS
MANUAL WIRELESS NETWORK SETUP
If your wireless network is already set up with Wi-Fi Protected Setup, manual configuration of the wireless network will destroy the existing wireless network. If you would like to configure the wireless settings of your new D-Link Systems Router manually, then click on the Manual Wireless Network Setup button below.
Manual Wireless Network Setup

Manual Wireless Settings
802.11n/g (2.4GHz)


WIRELESS NETWORK SETTINGS
Wireless Band : 2.4GHz Band
Enable Wireless : Always Add New
Wireless Network Name : dlink (Also called the SSID)
802.11 Mode : Mixed 802.11n, 802.11g and 802.11b
Enable Auto Channel Scan :
Wireless Channel : 2.437 GHz - CH 6
Transmission Rate : Best (automatic) (Mbit/s)
Channel Width : 20 MHz
Visibility Status : Visible Invisible
WIRELESS SECURITY MODE
To protect your privacy you can configure wireless security features. This device supports three wireless security modes, including WEP, WPA-Personal, and WPA-Enterprise. WEP is the original wireless encryption standard. WPA provides a higher level of security. WPA-Personal does not require an authentication server. The WPA-Enterprise option requires an external RADIUS server.
Security Mode : WPA-Personal

Enable Wireless: Check the box to enable the wireless function. If you do not want to use wireless, uncheck the box to disable all the wireless functions.

Schedule: Select the time frame that you would like your wireless network enabled. The schedule may be set to Always. Any schedule you create will be available in the drop-down menu. Click **Add New** to create a new schedule.

Wireless Network Name: Service Set Identifier (SSID) is the name of your wireless network. Create a name using up to 32 characters. The SSID is case-sensitive.

802.11 Mode: Select one of the following:
802.11g Only - Select if all of your wireless clients are 802.11g.
Mixed 802.11n and 802.11g - Select if you are using both 802.11n and 802.11g wireless clients.
802.11n Only - Select only if all of your wireless clients are 802.11n.

Enable Auto Channel Scan: The **Auto Channel Scan** setting can be selected to allow the DIR-825 to choose the channel with the least amount of interference.

Wireless Channel: Indicates the channel setting for the DIR-825. By default the channel is set to 6. The Channel can be changed to fit the channel setting for an existing wireless network or to customize the wireless network. If you enable **Auto Channel Scan**, this option will be greyed out.

Transmission Rate: Select the transmit rate. It is strongly suggested to select **Best (Auto)** for best performance.

Channel Width: Select the Channel Width:
Auto 20/40 - This is the default setting. Select if you are using both 802.11n and non-802.11n wireless devices.
20MHz - Select if you are not using any 802.11n wireless clients.
40MHz - Select if you are using 802.11n wireless clients only.

Visibility Status: Select **Invisible** if you do not want the SSID of your wireless network to be broadcasted by the DIR-825. If Invisible is selected, the SSID of the DIR-825 will not be seen by Site Survey utilities so your wireless clients will have to know the SSID of your DIR-825 in order to connect to it.

Wireless Security: Refer to page 83 for more information regarding wireless security.

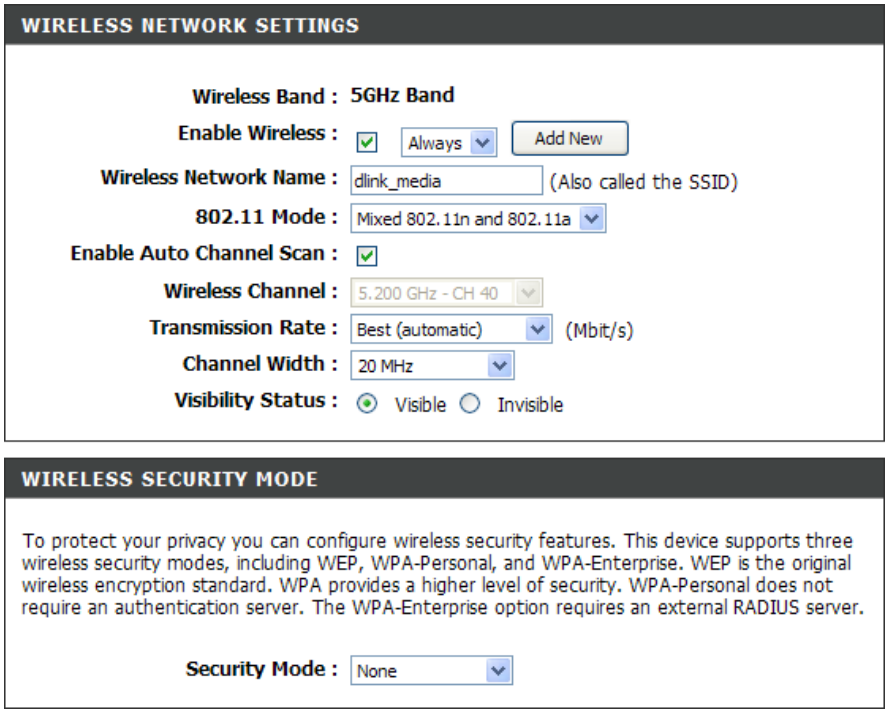
802.11n/a (5GHz)

Enable Wireless: Check the box to enable the wireless function. If you do not want to use wireless, uncheck the box to disable all the wireless functions.

Schedule: Select the time frame that you would like your wireless network enabled. The schedule may be set to Always. Any schedule you create will be available in the drop-down menu. Click **Add New** to create a new schedule.

Wireless Network Name: Service Set Identifier (SSID) is the name of your wireless network. Create a name using up to 32 characters. The SSID is case-sensitive.

802.11 Mode: Select one of the following:
802.11a Only - Select if all of your wireless clients are 802.11a.
Mixed 802.11n and 802.11a - Select if you are using both 802.11n and 802.11a wireless clients.
802.11n Only - Select only if all of your wireless clients are 802.11n.


WIRELESS NETWORK SETTINGS
Wireless Band : 5GHz Band
Enable Wireless :
Always
Add New
Wireless Network Name : dlink_media
(Also called the SSID)
802.11 Mode : Mixed 802.11n and 802.11a
Enable Auto Channel Scan :
Wireless Channel : 5.200 GHz - CH 40
Transmission Rate : Best (automatic)
(Mbit/s)
Channel Width : 20 MHz
Visibility Status : Visible Invisible
WIRELESS SECURITY MODE
To protect your privacy you can configure wireless security features. This device supports three wireless security modes, including WEP, WPA-Personal, and WPA-Enterprise. WEP is the original wireless encryption standard. WPA provides a higher level of security. WPA-Personal does not require an authentication server. The WPA-Enterprise option requires an external RADIUS server.
Security Mode : None

Enable Auto Channel Scan: The **Auto Channel Scan** setting can be selected to allow the DIR-825 to choose the channel with the least amount of interference.

Wireless Channel: Indicates the channel setting for the DIR-825. By default the channel is set to 6. The Channel can be changed to fit the channel setting for an existing wireless network or to customize the wireless network. If you enable **Auto Channel Scan**, this option will be greyed out.

Transmission Rate: Select the transmit rate. It is strongly suggested to select **Best (Auto)** for best performance.

Channel Width: Select the Channel Width:
Auto 20/40 - This is the default setting. Select if you are using both 802.11n and non-802.11n wireless devices.
20MHz - Select if you are not using any 802.11n wireless clients.
40MHz - Select if you are using 802.11n wireless clients only.

Visibility Status: Select **Invisible** if you do not want the SSID of your wireless network to be broadcasted by the DIR-825. If Invisible is selected, the SSID of the DIR-825 will not be seen by Site Survey utilities so your wireless clients will have to know the SSID of your DIR-825 in order to connect to it.

Wireless Security: Refer to page 83 for more information regarding wireless security.

Network Settings

This section will allow you to change the local network settings of the router and to configure the DHCP settings.

Router Settings

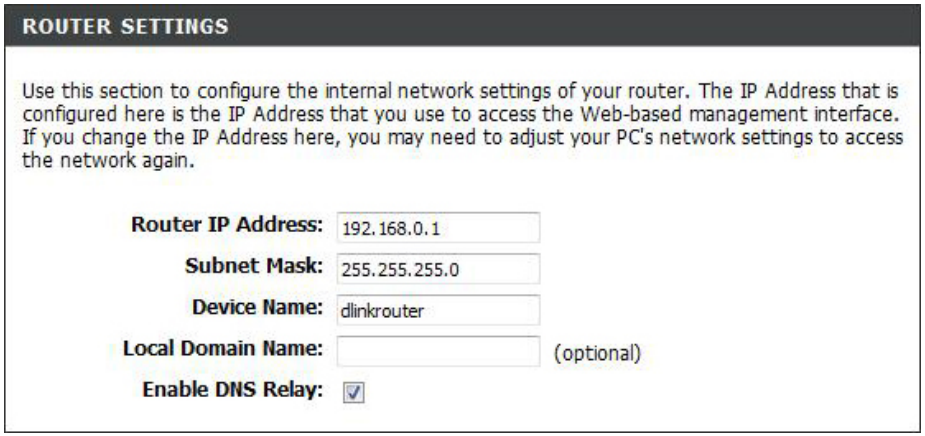
Router IP Address: Enter the IP address of the router. The default IP address is 192.168.0.1.

If you change the IP address, once you click **Apply**, you will need to enter the new IP address in your browser to get back into the configuration utility.

Subnet Mask: Enter the Subnet Mask. The default subnet mask is 255.255.255.0.

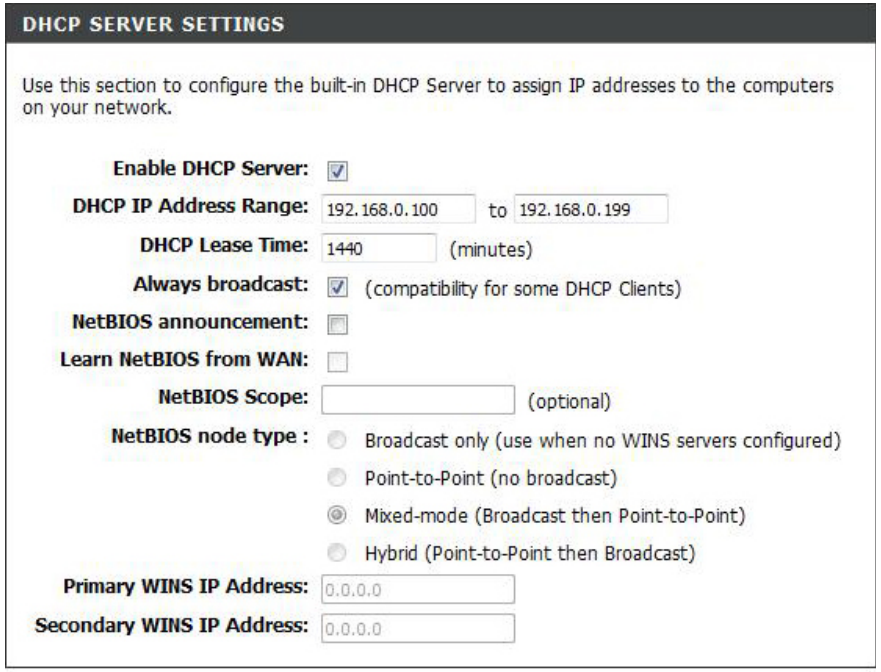
Local Domain: Enter the Domain name (Optional).

Enable DNS Relay: Uncheck the box to transfer the DNS server information from your ISP to your computers. If checked, your computers will use the router for a DNS server.


ROUTER SETTINGS
Use this section to configure the internal network settings of your router. The IP Address that is configured here is the IP Address that you use to access the Web-based management interface. If you change the IP Address here, you may need to adjust your PC's network settings to access the network again.
Router IP Address:
192.168.0.1
Subnet Mask:
255.255.255.0
Device Name:
dlinkrouter
Local Domain Name:
(optional)
Enable DNS Relay:

DHCP Server Settings

DHCP stands for Dynamic Host Control Protocol. The DIR-825 has a built-in DHCP server. The DHCP Server will automatically assign an IP address to the computers on the LAN/private network. Be sure to set your computers to be DHCP clients by setting their TCP/IP settings to “Obtain an IP Address Automatically.” When you turn your computers on, they will automatically load the proper TCP/IP settings provided by the DIR-825. The DHCP Server will automatically allocate an unused IP address from the IP address pool to the requesting computer. You must specify the starting and ending address of the IP address pool.



Enable DHCP Server: Check this box to enable the DHCP server on your router. Uncheck to disable this function.

DHCP IP Address Range: Enter the starting and ending IP addresses for the DHCP server’s IP assignment.

Note: If you statically (manually) assign IP addresses to your computers or devices, make sure the IP addresses are outside of this range or you may have an IP conflict.

DHCP Lease Time: The length of time for the IP address lease. Enter the Lease time in minutes.

Always Broadcast: Enable this feature to broadcast your networks DHCP server to LAN/WLAN clients.

NetBIOS Announcement: NetBIOS allows LAN hosts to discover all other computers within the network, enable this feature to allow the DHCP Server to offer NetBIOS configuration settings.

Learn NetBIOS from WAN: Enable this feature to allow WINS information to be learned from the WAN side, disable to allow manual configuration.

NetBIOS Scope: This feature allows the configuration of a NetBIOS ‘domain’ name under which network hosts operates. This setting has no effect if the ‘Learn NetBIOS information from WAN’ is activated.

NetBIOS Node: Select the different type of NetBIOS node; **Broadcast only**, **Point-to-Point**, **Mixed-mode**, and **Hybrid**.

WINS IP Address: Enter your WINS IP address

DHCP Reservation

If you want a computer or device to always have the same IP address assigned, you can create a DHCP reservation. The router will assign the IP address only to that computer or device.

Note: This IP address must be within the DHCP IP Address Range.

Enable: Check this box to enable the reservation.

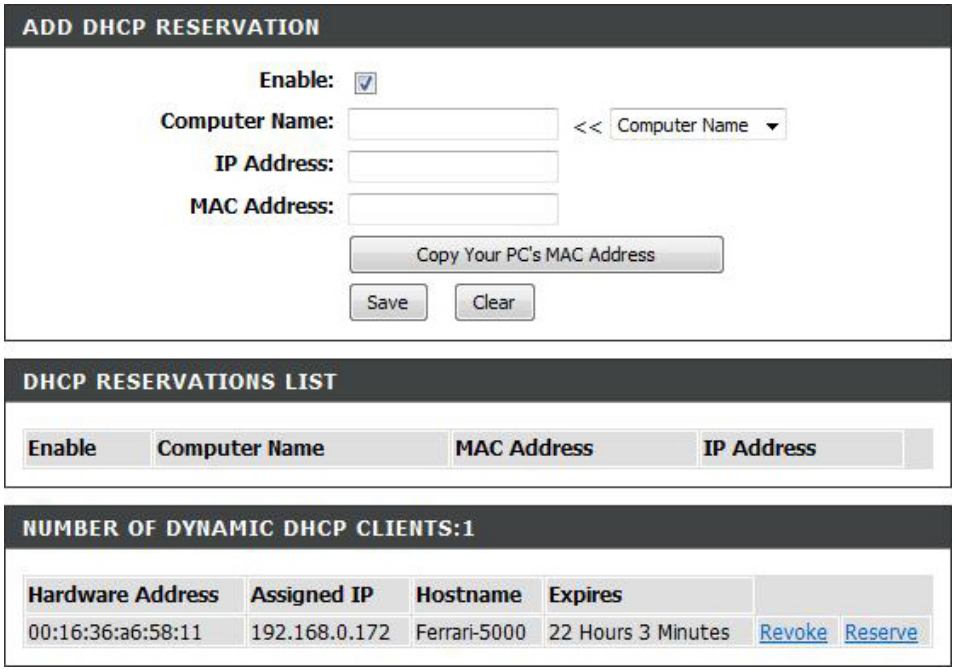
Computer Name: Enter the computer name or select from the drop down menu and click <<.

IP Address: Enter the IP address you want to assign to the computer or device. This IP Address must be within the DHCP IP Address Range.

MAC Address: Enter the MAC address of the computer or device.

Copy Your PC's MAC Address: If you want to assign an IP address to the computer you are currently on, click this button to populate the fields.

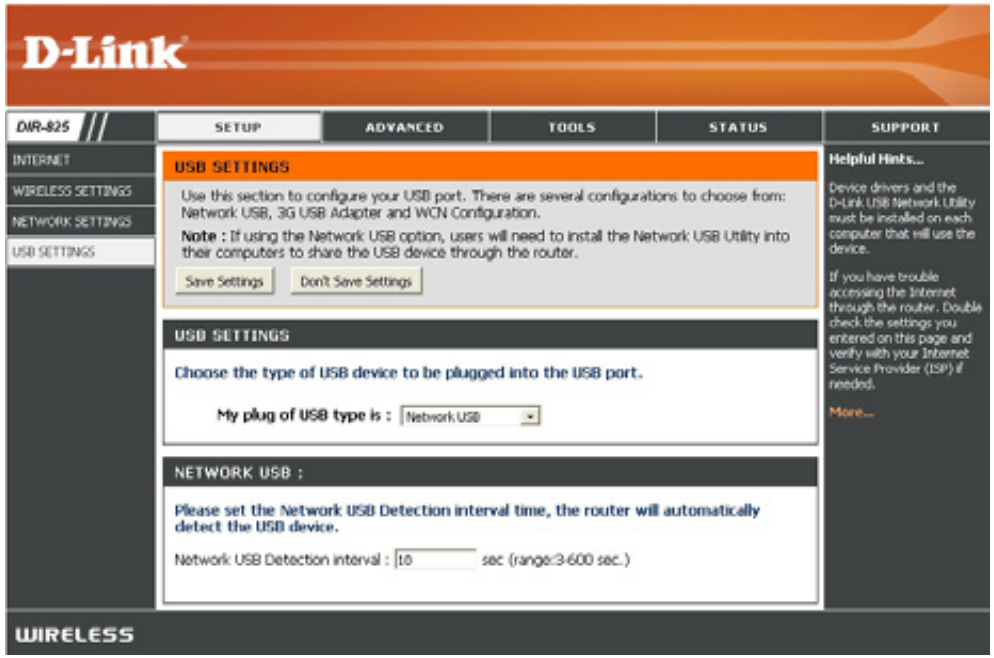
Save: Click **Save** to save your entry. You must click **Save Settings** at the top to activate your reservations.



USB Settings

Use this section to configure your USB port. There are two configurations to choose from: Network USB and WCN Configuration.

Note: If using the Network USB option, users will need to install the Network USB Utility into the computers to share the USB device through the router.


D-Link
DIR-825
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
INTERNET
WIRELESS SETTINGS
NETWORK SETTINGS
USB SETTINGS
USB SETTINGS
Use this section to configure your USB port. There are several configurations to choose from: Network USB, 3G USB Adapter and WCN Configuration.
Note : If using the Network USB option, users will need to install the Network USB Utility into their computers to share the USB device through the router.
Save Settings
Don't Save Settings
USB SETTINGS
Choose the type of USB device to be plugged into the USB port.
My plug of USB type is : Network USB
NETWORK USB :
Please set the Network USB Detection interval time, the router will automatically detect the USB device.
Network USB Detection interval : 10 sec (range:3-600 sec.)
Helpful Hints...
Device drivers and the D-Link USB Network Utility must be installed on each computer that will use the device.
If you have trouble accessing the Internet through the router. Double check the settings you entered on this page and verify with your Internet Service Provider (ISP) if needed.
More...
WIRELESS

USB Settings: Choose between these two configuration: Network USB and WCN Configuration.

Network USB: Please set the Network USB Detection interval time.

Note: Please see the SharePort Manual on the CD for more information.

Virtual Server

The DIR-825 can be configured as a virtual server so that remote users accessing Web or FTP services via the public IP address can be automatically redirected to local servers in the LAN (Local Area Network).

The DIR-825 firewall feature filters out unrecognized packets to protect your LAN network so all computers networked with the DIR-825 are invisible to the outside world. If you wish, you can make some of the LAN computers accessible from the Internet by enabling Virtual Server. Depending on the requested service, the DIR-825 redirects the external service request to the appropriate server within the LAN network.

The DIR-825 is also capable of port-redirection meaning incoming traffic to a particular port may be redirected to a different port on the server computer.

Each virtual service that is created will be listed at the bottom of the screen in the Virtual Servers List. There are pre-defined virtual services already in the table. You may use them by enabling them and assigning the server IP to use that particular virtual service.

For a list of ports for common applications, please visit **http://support.dlink.com/faq/view.asp?prod_id=1191**.

This will allow you to open a single port. If you would like to open a range of ports, refer to the next page.

Name: Enter a name for the rule or select an application from the drop-down menu. Select an application and click << to populate the fields.

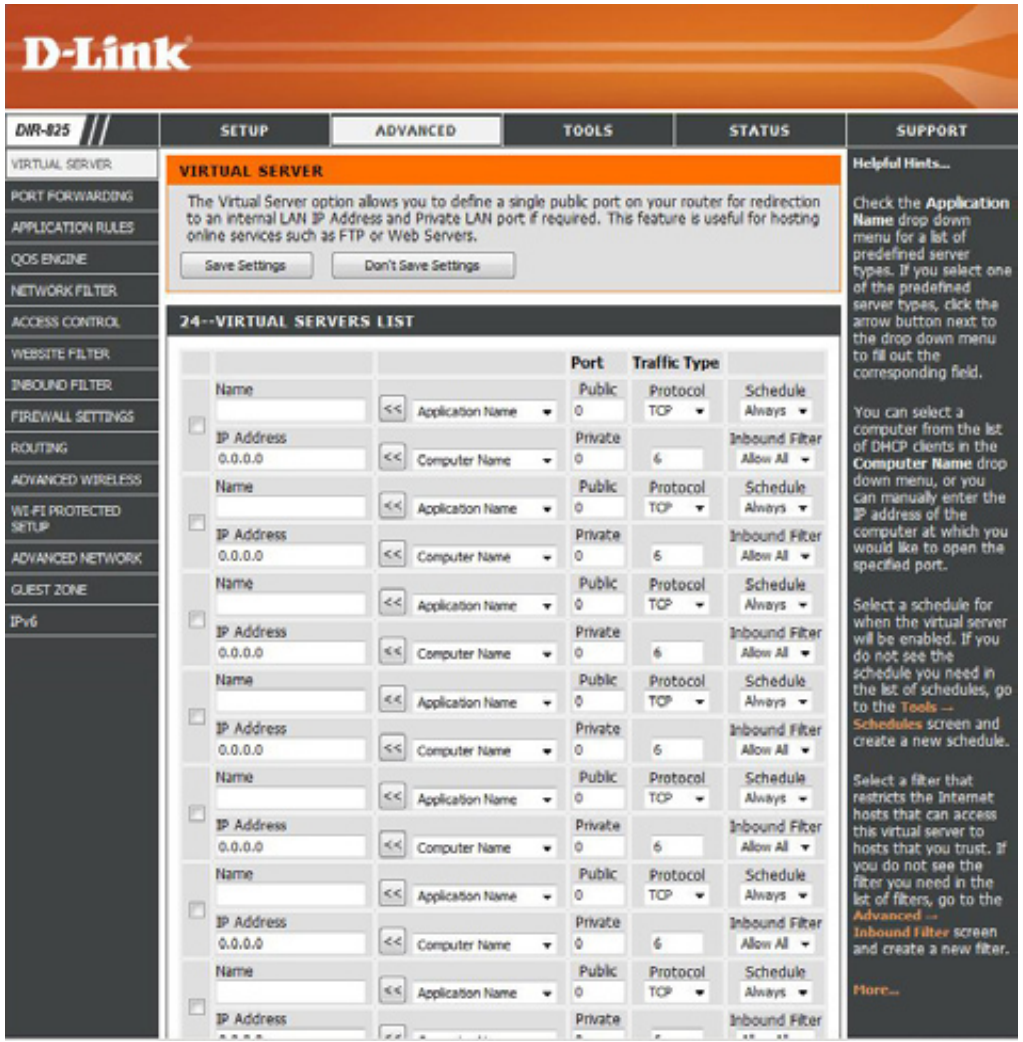
IP Address: Enter the IP address of the computer on your local network that you want to allow the incoming service to. If your computer is receiving an IP address automatically from the router (DHCP), you computer will be listed in the "Computer Name" drop-down menu. Select your computer and click <<.

Private Port/ Public Port: Enter the port that you want to open next to Private Port and Public Port. The private and public ports are usually the same. The public port is the port seen from the Internet side, and the private port is the port being used by the application on the computer within your local network.

Protocol Type: Select **TCP**, **UDP**, or **Both** from the drop-down menu.

Schedule: The schedule of time when the Virtual Server Rule will be enabled. The schedule may be set to Always, which will allow the particular service to always be enabled. You can create your own times in the **Tools** > **Schedules** section.

Inbound Filter: Select **Allow All** (most common) or a created Inbound filter. You may create your own inbound filters in the **Advanced > Inbound Filter** page.


D-Link
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QOS ENGINE
NETWORK FILTER
ACCESS CONTROL
WEBSITE FILTER
INBOUND FILTER
FIREWALL SETTINGS
ROUTING
ADVANCED WIRELESS
WI-FI PROTECTED SETUP
ADVANCED NETWORK
GUEST ZONE
IPv6
VIRTUAL SERVER
The Virtual Server option allows you to define a single public port on your router for redirection to an internal LAN IP Address and Private LAN port if required. This feature is useful for hosting online services such as FTP or Web Servers.
Save Settings
Don't Save Settings
24--VIRTUAL SERVERS LIST
Port
Traffic Type
Name
Application Name
Public
Protocol
Schedule
IP Address
Computer Name
Private
Inbound Filter
Helpful Hints...
Check the Application Name drop down menu for a list of predefined server types. If you select one of the predefined server types, click the arrow button next to the drop down menu to fill out the corresponding field.
You can select a computer from the list of DHCP clients in the Computer Name drop down menu, or you can manually enter the IP address of the computer at which you would like to open the specified port.
Select a schedule for when the virtual server will be enabled. If you do not see the schedule you need in the list of schedules, go to the Tools -- Schedules screen and create a new schedule.
Select a filter that restricts the Internet hosts that can access this virtual server to hosts that you trust. If you do not see the filter you need in the list of filters, go to the Advanced -- Inbound Filter screen and create a new filter.
More...

Port Forwarding

This will allow you to open a single port or a range of ports.

Name: Enter a name for the rule or select an application from the drop-down menu. Select an application and click << to populate the fields.

IP Address: Enter the IP address of the computer on your local network that you want to allow the incoming service to. If your computer is receiving an IP address automatically from the router (DHCP), you computer will be listed in the “Computer Name” drop-down menu. Select your computer and click <<.

TCP/UDP: Enter the TCP and/or UDP port or ports that you want to open. You can enter a single port or a range of ports. Separate ports with a common.

Example: 24,1009,3000-4000

Schedule: The schedule of time when the Virtual Server Rule will be enabled. The schedule may be set to Always, which will allow the particular service to always be enabled. You can create your own times in the **Tools** > **Schedules** section.

Inbound Filter: Select **Allow All** (most common) or a created Inbound filter. You may create your own inbound filters in the **Advanced > Inbound Filter** page.

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ADVANCED NETWORK
GUEST ZONE
IPv6
PORT FORWARDING
This option is used to open multiple ports or a range of ports in your router and redirect data through those ports to a single PC on your network. This feature allows you to enter ports in various formats including, Port Ranges (100-150), Individual Ports (80, 68, 888), or Mixed (1020-5000, 689).This option is only applicable to the INTERNET session.
Save Settings
Don't Save Settings
24 -- PORT FORWARDING RULES
Ports to Open
Name
Application Name
TCP
Schedule
IP Address
Computer Name
UDP
Inbound Filter
Always
Allow All
Helpful Hints...
Check the Application Name drop down menu for a list of predefined applications. If you select one of the predefined applications, click the arrow button next to the drop down menu to fill out the corresponding field.
You can select a computer from the list of DHCP clients in the Computer Name drop down menu, or you can manually enter the IP address of the LAN computer to which you would like to open the specified port.
Select a schedule for when the rule will be enabled. If you do not see the schedule you need in the list of schedules, go to the Tools -- Schedules screen and create a new schedule.
You can enter ports in various formats:
Range (50-100)
Individual (80, 68, 888)
Mixed (1020-5000, 689)

Application Rules

Some applications require multiple connections, such as Internet gaming, video conferencing, Internet telephony and others. These applications have difficulties working through NAT (Network Address Translation). Special Applications makes some of these applications work with the DIR-825. If you need to run applications that require multiple connections, specify the port normally associated with an application in the “Trigger Port” field, select the protocol type as TCP or UDP, then enter the firewall (public) ports associated with the trigger port to open them for inbound traffic.

The DIR-825 provides some predefined applications in the table on the bottom of the web page. Select the application you want to use and enable it.

Name: Enter a name for the rule. You may select a pre-defined application from the drop-down menu and click **<<**.

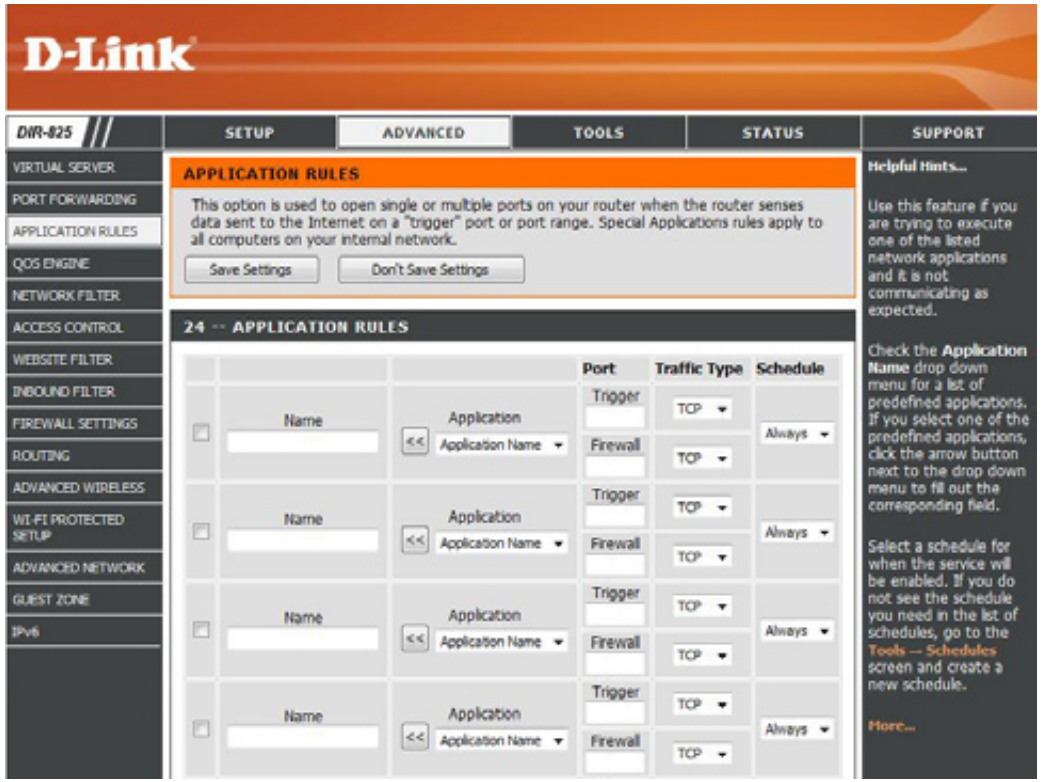
Trigger: This is the port used to trigger the application. It can be either a single port or a range of ports.

Traffic Type: Select the protocol of the trigger port (TCP, UDP, or Both).

Firewall: This is the port number on the Internet side that will be used to access the application. You may define a single port or a range of ports. You can use a comma to add multiple ports or port ranges.

Traffic Type: Select the protocol of the firewall port (TCP, UDP, or Both).

Schedule: The schedule of time when the Application Rule will be enabled. The schedule may be set to Always, which will allow the particular service to always be enabled. You can create your own times in the **Tools** > **Schedules** section.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QOS ENGINE
NETWORK FILTER
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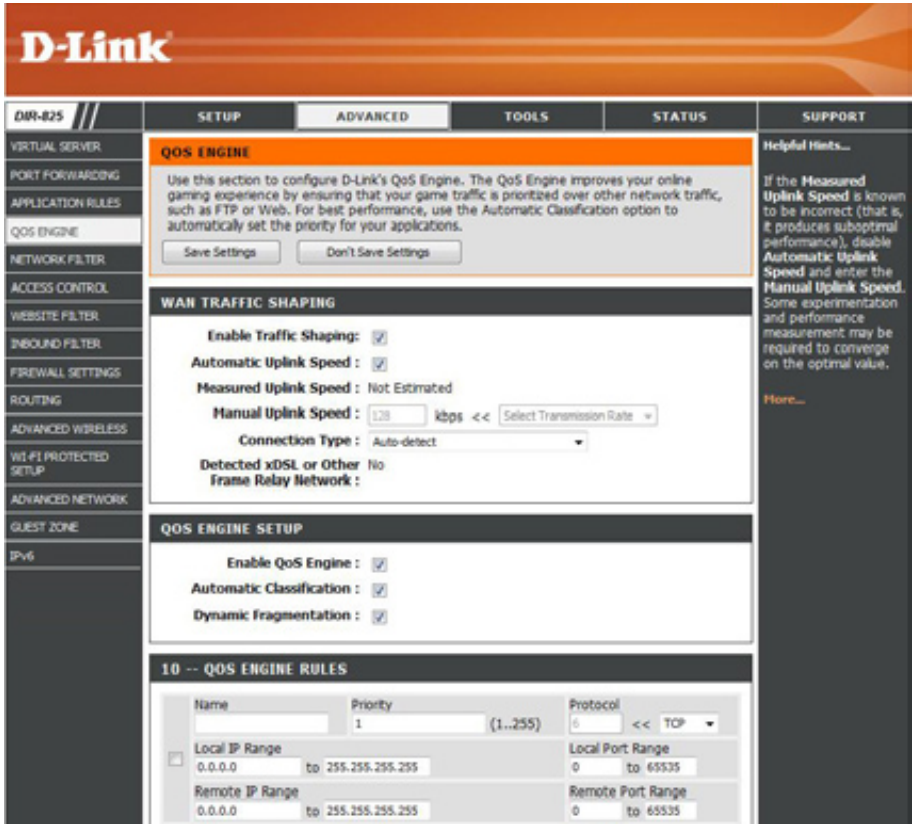
ROUTING
ADVANCED WIRELESS
WI-FI PROTECTED SETUP
ADVANCED NETWORK
GUEST ZONE
IPv6
APPLICATION RULES
This option is used to open single or multiple ports on your router when the router senses data sent to the Internet on a "trigger" port or port range. Special Applications rules apply to all computers on your internal network.
Save Settings
Don't Save Settings
24 -- APPLICATION RULES
Port
Traffic Type
Schedule
Name
Application
Application Name
Trigger
Firewall
TCP
Always
Helpful Hints...
Use this feature if you are trying to execute one of the listed network applications and it is not communicating as expected.
Check the Application Name drop down menu for a list of predefined applications. If you select one of the predefined applications, click the arrow button next to the drop down menu to fill out the corresponding field.
Select a schedule for when the service will be enabled. If you do not see the schedule you need in the list of schedules, go to the Tools -- Schedules screen and create a new schedule.
More...

QoS Engine

The QoS Engine option helps improve your network gaming performance by prioritizing applications. By default the QoS Engine settings are disabled and application priority is not classified automatically.


D-Link
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QOS ENGINE
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QOS ENGINE
Use this section to configure D-Link's QoS Engine. The QoS Engine improves your online gaming experience by ensuring that your game traffic is prioritized over other network traffic, such as FTP or Web. For best performance, use the Automatic Classification option to automatically set the priority for your applications.
Save Settings
Don't Save Settings
WAN TRAFFIC SHAPING
Enable Traffic Shaping:
Automatic Uplink Speed :
Measured Uplink Speed : Not Estimated
Manual Uplink Speed : kbps << Select Transmission Rate
Connection Type : Auto-detect
Detected xDSL or Other Frame Relay Network : No
QOS ENGINE SETUP
Enable QoS Engine :
Automatic Classification :
Dynamic Fragmentation :
10 -- QOS ENGINE RULES
Name
Priority
(1..255)
Protocol
<< TCP
Local IP Range
0.0.0.0 to 255.255.255.255
Local Port Range
0 to 65535
Remote IP Range
0.0.0.0 to 255.255.255.255
Remote Port Range
0 to 65535
Helpful Hints...
If the Measured Uplink Speed is known to be incorrect (that is, it produces suboptimal performance), disable Automatic Uplink Speed and enter the Manual Uplink Speed. Some experimentation and performance measurement may be required to converge on the optimal value.
More...

Enable Traffic Shaping: This option is disabled by default. Enable this option for better performance and experience with online games and other interactive applications, such as VoIP.

Automatic Uplink Speed: This option is enabled by default when the QoS Engine option is enabled. This option will allow your router to automatically determine the uplink speed of your Internet connection.

Measured Uplink Speed: This displays the detected uplink speed.

Manual Uplink Speed: The speed at which data can be transferred from the router to your ISP. This is determined by your ISP. ISP's often speed as a download/upload pair. For example, 1.5Mbits/284Kbits. Using this example, you would enter 284. Alternatively you can test your uplink speed with a service such as www.dslreports.com.

Connection Type: By default, the router automatically determines whether the underlying connection is an xDSL/Frame-relay network or some other connection type (such as cable modem or Ethernet), and it displays the result as Detected xDSL or Frame Relay Network. If you have an unusual network connection in which you are actually connected via xDSL but for which you configure either "Static" or "DHCP" in the Internet settings, setting this option to xDSL or Other Frame Relay Network ensures that the router will recognize that it needs to shape traffic slightly differently in order to give the best performance. Choosing xDSL or Other Frame Relay Network causes the measured uplink speed to be reported slightly lower than before on such connections, but gives much better results.

Detected xDSL: When Connection Type is set to automatic, the automatically detected connection type is displayed here.

Enable QoS Engine: This option is disabled by default. Enable this option for better performance and experience with online games and other interactive applications, such as VoIP.

Automatic Classification: This option is enabled by default. This will allow your router to automatically determine the network priority of running programs.

Dynamic Fragmentation: This option should be enabled when you have a slow Internet uplink. It helps to reduce the impact that large low priority network packets can have on more urgent ones.

Network Filters

Use MAC (Media Access Control) Filters to allow or deny LAN (Local Area Network) computers by their MAC addresses from accessing the network. You can either manually add a MAC address or select the MAC address from the list of clients that are currently connected to the Broadband Router.

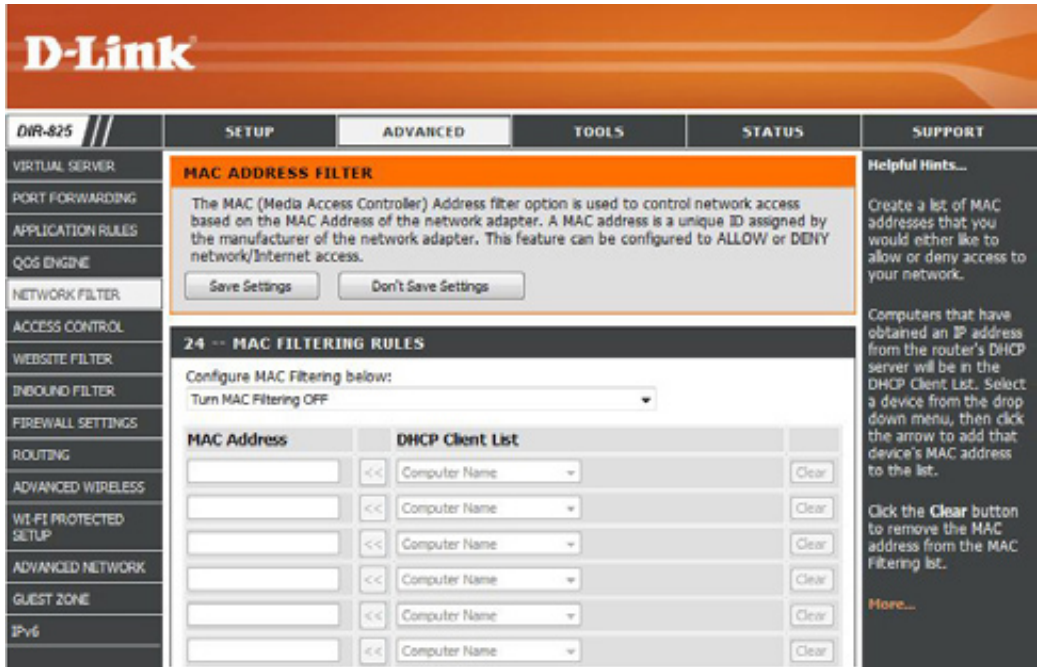
Configure MAC Filtering: Select **Turn MAC Filtering Off**, **Allow MAC addresses listed below**, or **Deny MAC addresses listed below** from the drop-down menu.

MAC Address: Enter the MAC address you would like to filter.

To find the MAC address on a computer, please refer to the *Networking Basics* section in this manual.

DHCP Client: Select a DHCP client from the drop-down menu and click << to copy that MAC Address.

Clear: Click to remove the MAC address.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MAC ADDRESS FILTER
The MAC (Media Access Controller) Address filter option is used to control network access based on the MAC Address of the network adapter. A MAC address is a unique ID assigned by the manufacturer of the network adapter. This feature can be configured to ALLOW or DENY network/Internet access.
Save Settings
Don't Save Settings
24 -- MAC FILTERING RULES
Configure MAC Filtering below:
Turn MAC Filtering OFF
MAC Address
DHCP Client List
Computer Name
Clear
Helpful Hints...
Create a list of MAC addresses that you would either like to allow or deny access to your network.
Computers that have obtained an IP address from the router's DHCP server will be in the DHCP Client List. Select a device from the drop down menu, then click the arrow to add that device's MAC address to the list.
Click the Clear button to remove the MAC address from the MAC Filtering list.
More...

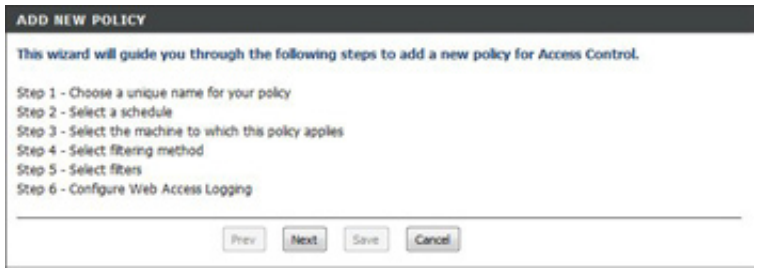
Access Control

The Access Control section allows you to control access in and out of your network. Use this feature as Parental Controls to only grant access to approved sites, limit web access based on time or dates, and/or block access from applications like P2P utilities or games.

Add Policy: Click the **Add Policy** button to start the Access Control Wizard.

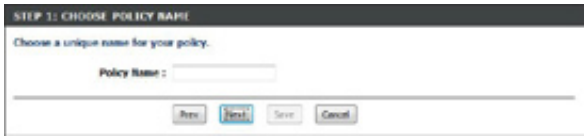
Access Control Wizard

Click **Next** to continue with the wizard.

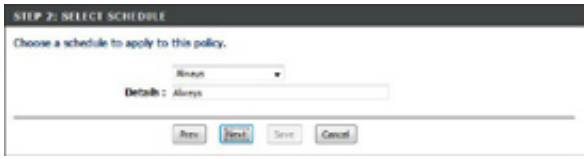

ADD NEW POLICY
This wizard will guide you through the following steps to add a new policy for Access Control.
Step 1 - Choose a unique name for your policy
Step 2 - Select a schedule
Step 3 - Select the machine to which this policy applies
Step 4 - Select filtering method
Step 5 - Select filters
Step 6 - Configure Web Access Logging
Prev
Next
Save
Cancel

Access Control Wizard (continued)

Enter a name for the policy and then click **Next** to continue.

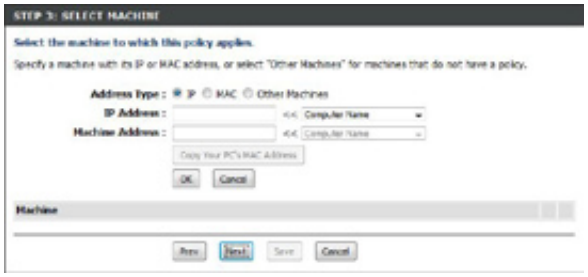


Select a schedule (I.E. Always) from the drop-down menu and then click **Next** to continue.



Enter the following information and then click **Next** to continue.

- **Address Type** - Select IP address, MAC address, or Other Machines.
- **IP Address** - Enter the IP address of the computer you want to apply the rule to.

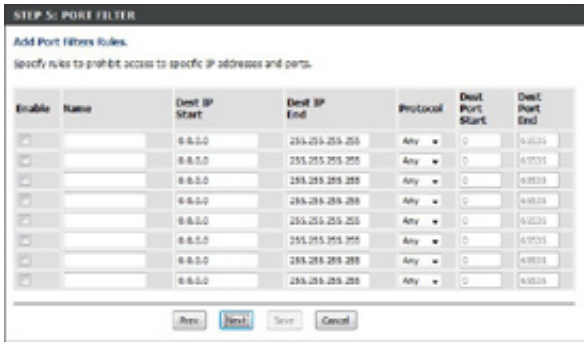

STEP 3: SELECT MACHINE
Select the machine to which this policy applies.
Specify a machine with its IP or MAC address, or select "Other Machines" for machines that do not have a policy.
Address Type : IP MAC Other Machines
IP Address :
Machine Address :
Computer Name
Copy Your PC's MAC Address
OK
Cancel
Machine
Prev
Next
Save
Cancel

Select the filtering method and then click **Next** to continue.

Access Control Wizard (continued)

Enter the rule:

Enable - Check to enable the rule.
Name - Enter a name for your rule.
Dest IP Start - Enter the starting IP address.
Dest IP End - Enter the ending IP address.
Protocol - Select the protocol.
Dest Port Start - Enter the starting port number.
Dest Port End - Enter the ending port number.



To enable web logging, click **Enable**.

Click **Save** to save the access control rule.

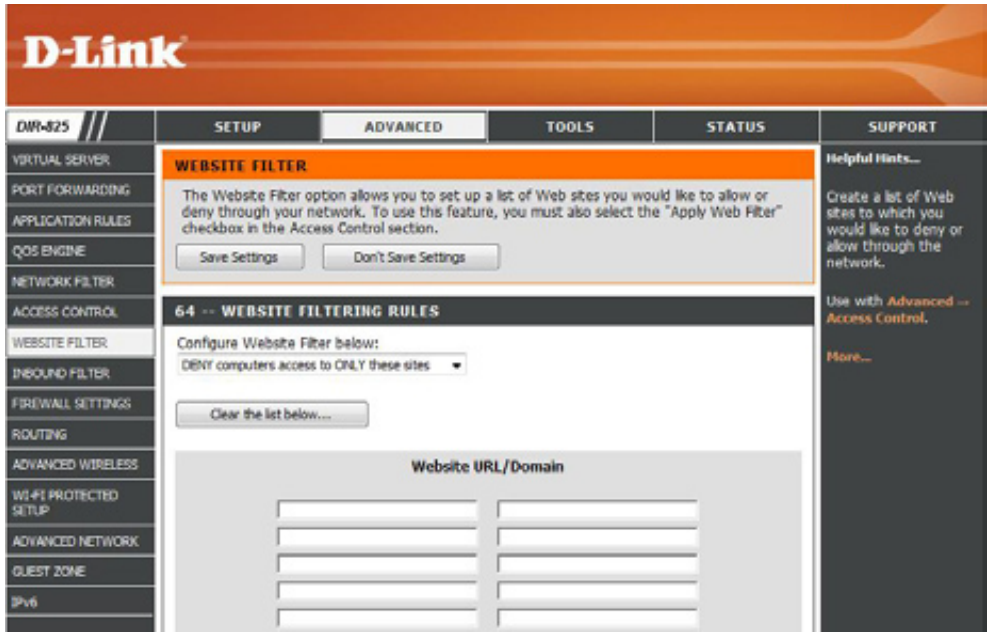
Your newly created policy will now show up under **Policy Table**.

Website Filters

Website Filters are used to allow you to set up a list of allowed Web sites that can be used by multiple users through the network. To use this feature select to **Allow** or **Deny**, enter the domain or website and click **Save Settings**. You must also select **Apply Web Filter** under the *Access Control* section (page 42).

Add Website Filtering Rule: Select **Allow** or **Deny**.

Website URL/ Domain: Enter the keywords or URLs that you want to allow or block. Click **Save Settings**.



Inbound Filters

The Inbound Filter option is an advanced method of controlling data received from the Internet. With this feature you can configure inbound data filtering rules that control data based on an IP address range. Inbound Filters can be used with Virtual Server, Port Forwarding, or Remote Administration features.

Name: Enter a name for the inbound filter rule.

Action: Select **Allow** or **Deny**.

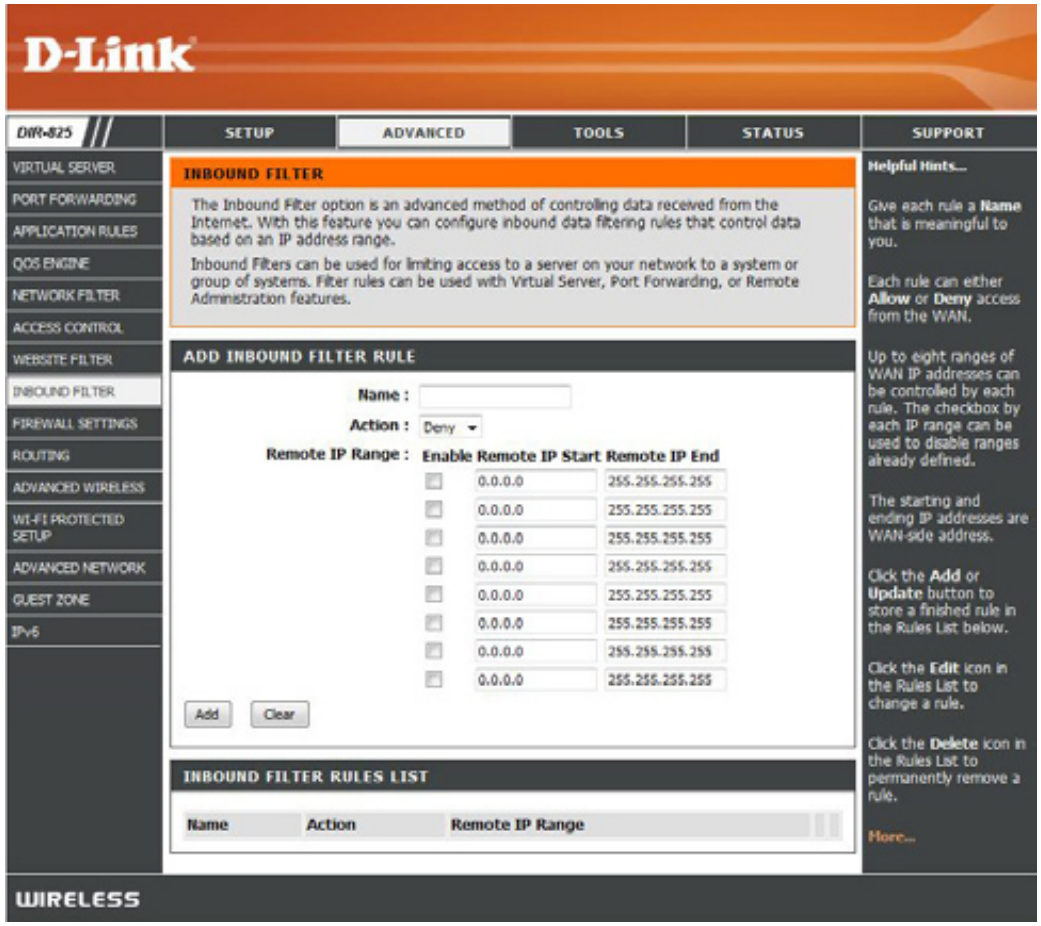
Enable: Check to enable rule.

Remote IP Start: Enter the starting IP address. Enter 0.0.0.0 if you do not want to specify an IP range.

Remote IP End: Enter the ending IP address. Enter 255.255.255.255 if you do not want to specify and IP range.

Add: Click the **Add** button to apply your settings. You must click **Save Settings** at the top to save the settings.

Inbound Filter Rules List: This section will list any rules that are created. You may click the **Edit** icon to change the settings or enable/disable the rule, or click the **Delete** icon to remove the rule.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FIREWALL SETTINGS
ROUTING
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WI-FI PROTECTED SETUP
ADVANCED NETWORK
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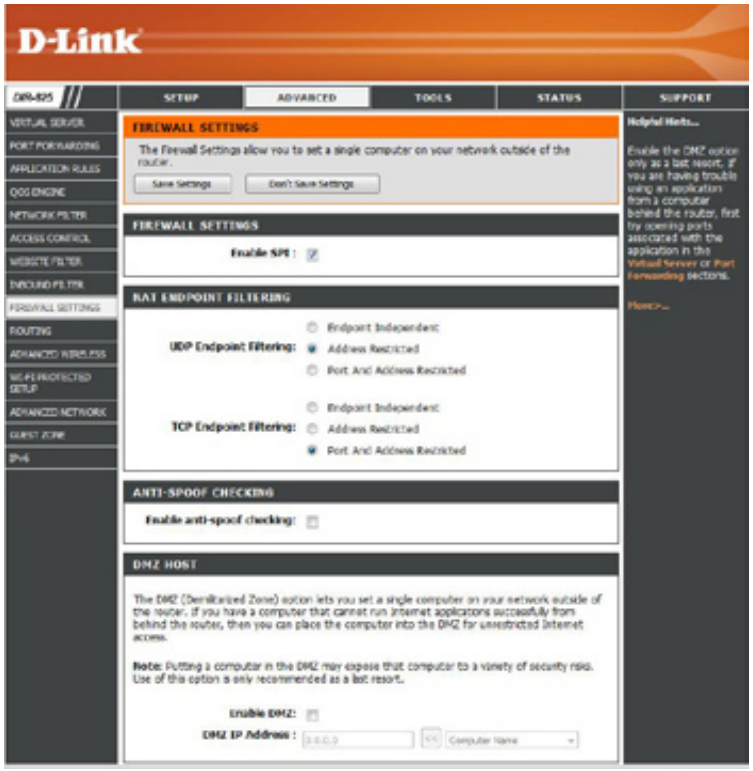
IPv6
INBOUND FILTER
The Inbound Filter option is an advanced method of controlling data received from the Internet. With this feature you can configure inbound data filtering rules that control data based on an IP address range.
Inbound Filters can be used for limiting access to a server on your network to a system or group of systems. Filter rules can be used with Virtual Server, Port Forwarding, or Remote Administration features.
ADD INBOUND FILTER RULE
Name :
Action :
Deny
Remote IP Range :
Enable Remote IP Start Remote IP End
0.0.0.0
255.255.255.255
Add
Clear
INBOUND FILTER RULES LIST
Name
Action
Remote IP Range
Helpful Hints...
Give each rule a Name that is meaningful to you.
Each rule can either Allow or Deny access from the WAN.
Up to eight ranges of WAN IP addresses can be controlled by each rule. The checkbox by each IP range can be used to disable ranges already defined.
The starting and ending IP addresses are WAN-side address.
Click the Add or Update button to store a finished rule in the Rules List below.
Click the Edit icon in the Rules List to change a rule.
Click the Delete icon in the Rules List to permanently remove a rule.
More...
WIRELESS

Firewall Settings

A firewall protects your network from the outside world. The DIR-825 offers a firewall type functionality. The SPI feature helps prevent cyber attacks. Sometimes you may want a computer exposed to the outside world for certain types of applications. If you choose to expose a computer, you can enable DMZ. DMZ is short for Demilitarized Zone. This option will expose the chosen computer completely to the outside world.



Enable SPI: SPI (Stateful Packet Inspection, also known as dynamic packet filtering) helps to prevent cyber attacks by tracking more state per session. It validates that the traffic passing through the session conforms to the protocol.

NAT Endpoint Filtering: Select one of the following for TCP and UDP ports:
Endpoint Independent - Any incoming traffic sent to an open port will be forwarded to the application that opened the port. The port will close if idle for 5 minutes.

Address Restricted - Incoming traffic must match the IP address of the outgoing connection.

Address + Port Restriction - Incoming traffic must match the IP address and port of the outgoing connection.

Anti-Spoof Check: Enable this feature to protect your network from certain kinds of "spoofing" attacks.

Enable DMZ: If an application has trouble working from behind the router, you can expose one computer to the Internet and run the application on that computer.

Note: Placing a computer in the DMZ may expose that computer to a variety of security risks. Use of this option is only recommended as a last resort.

DMZ IP Address: Specify the IP address of the computer on the LAN that you want to have unrestricted Internet communication. If this computer obtains it's IP address automatically using DHCP, be sure to make a static reservation on the **Setup** > **Network Settings** page so that the IP address of the DMZ machine does not change.

Routing

The Routing option is an advanced method of customizing specific routes of data through your network.

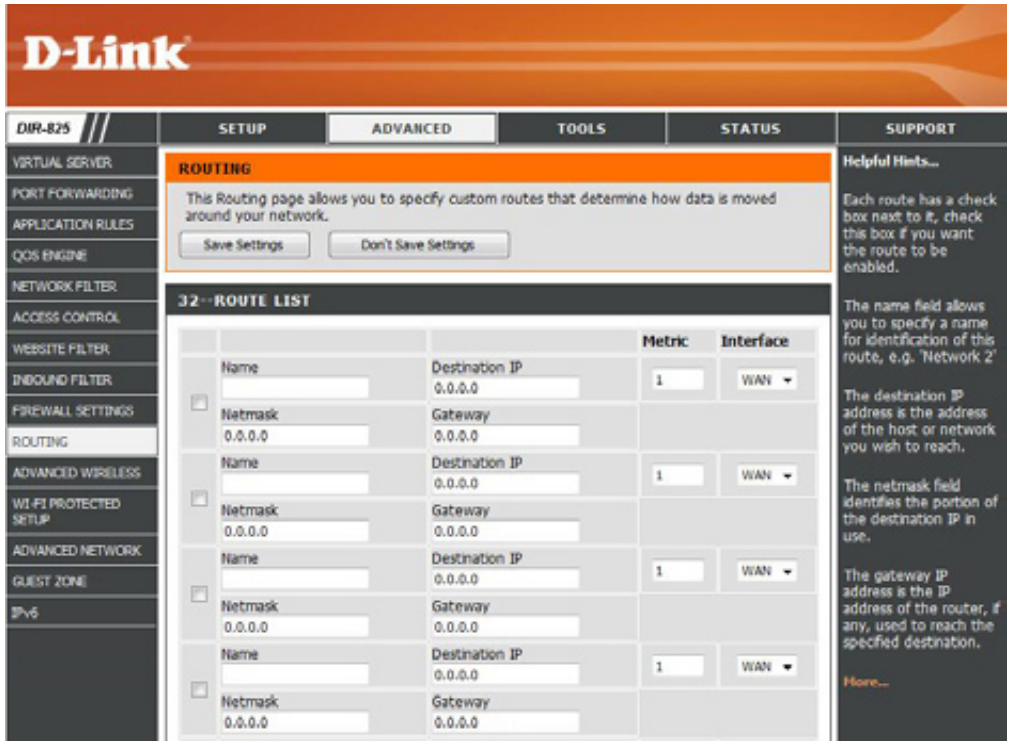
Destination IP: Enter the IP address of packets that will take this route.

Netmask: Enter the netmask of the route, please note that the octets must match your destination IP address.

Gateway: Enter your next hop gateway to be taken if this route is used.

Metric: The route metric is a value from 1 to 16 that indicates the cost of using this route. A value 1 is the lowest cost and 15 is the highest cost.

Interface: Select the interface that the IP packet must use to transit out of the router when this route is used.



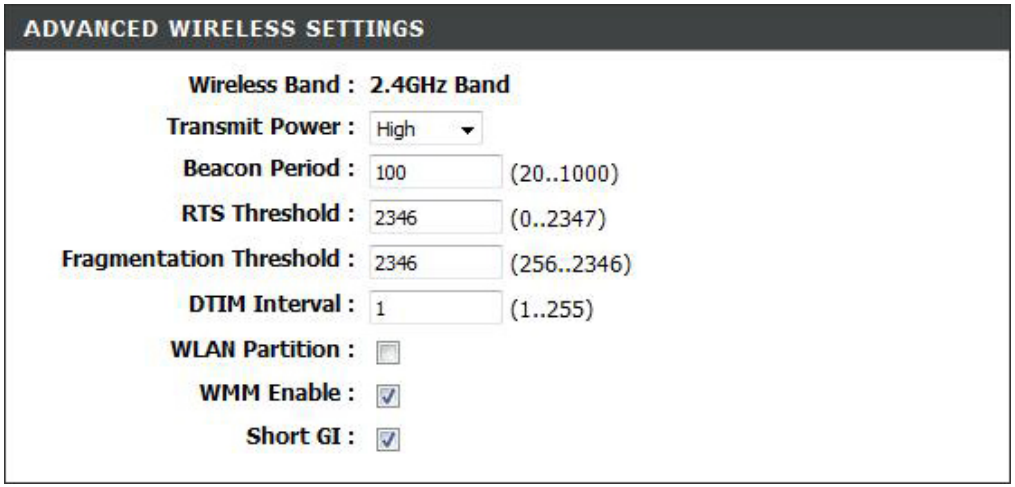
Advanced Wireless Settings
802.11n/g (2.4GHz)

Transmit Power: Set the transmit power of the antennas.

Beacon Period: Beacons are packets sent by an Access Point to synchronize a wireless network. Specify a value. 100 is the default setting and is recommended.

RTS Threshold: This value should remain at its default setting of 2432. If inconsistent data flow is a problem, only a minor modification should be made.

Fragmentation Threshold: The fragmentation threshold, which is specified in bytes, determines whether packets will be fragmented. Packets exceeding the 2346 byte setting will be fragmented before transmission. 2346 is the default setting.


ADVANCED WIRELESS SETTINGS
Wireless Band : 2.4GHz Band
Transmit Power : High
Beacon Period : 100 (20..1000)
RTS Threshold : 2346 (0..2347)
Fragmentation Threshold : 2346 (256..2346)
DTIM Interval : 1 (1..255)
WLAN Partition :
WMM Enable :
Short GI :

DTIM Interval: (Delivery Traffic Indication Message) 3 is the default setting. A DTIM is a countdown informing clients of the next window for listening to broadcast and multicast messages.

WLAN Partition: Enable this option to prevent associated wireless clients from communicating with each other.

WMM Function: WMM is QoS for your wireless network. This will improve the quality of video and voice applications for your wireless clients.

Short GI: Check this box to reduce the guard interval time therefore increasing the data capacity. However, it's less reliable and may create higher data loss.

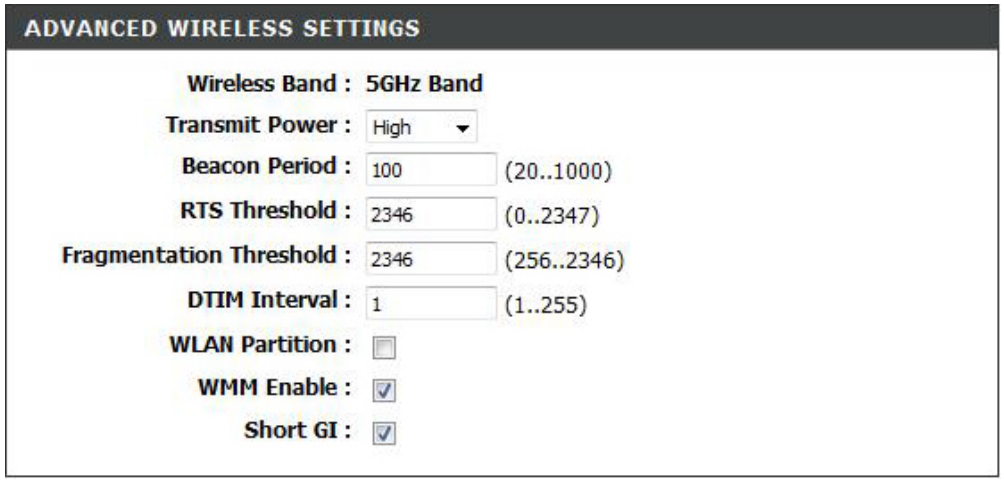
Advanced Wireless Settings
802.11n/a (5GHz)

Transmit Power: Set the transmit power of the antennas.

Beacon Period: Beacons are packets sent by an Access Point to synchronize a wireless network. Specify a value. 100 is the default setting and is recommended.

RTS Threshold: This value should remain at its default setting of 2432. If inconsistent data flow is a problem, only a minor modification should be made.

Fragmentation Threshold: The fragmentation threshold, which is specified in bytes, determines whether packets will be fragmented. Packets exceeding the 2346 byte setting will be fragmented before transmission. 2346 is the default setting.


ADVANCED WIRELESS SETTINGS
Wireless Band : 5GHz Band
Transmit Power : High
Beacon Period : 100 (20..1000)
RTS Threshold : 2346 (0..2347)
Fragmentation Threshold : 2346 (256..2346)
DTIM Interval : 1 (1..255)
WLAN Partition :
WMM Enable :
Short GI :

DTIM Interval: (Delivery Traffic Indication Message) 3 is the default setting. A DTIM is a countdown informing clients of the next window for listening to broadcast and multicast messages.

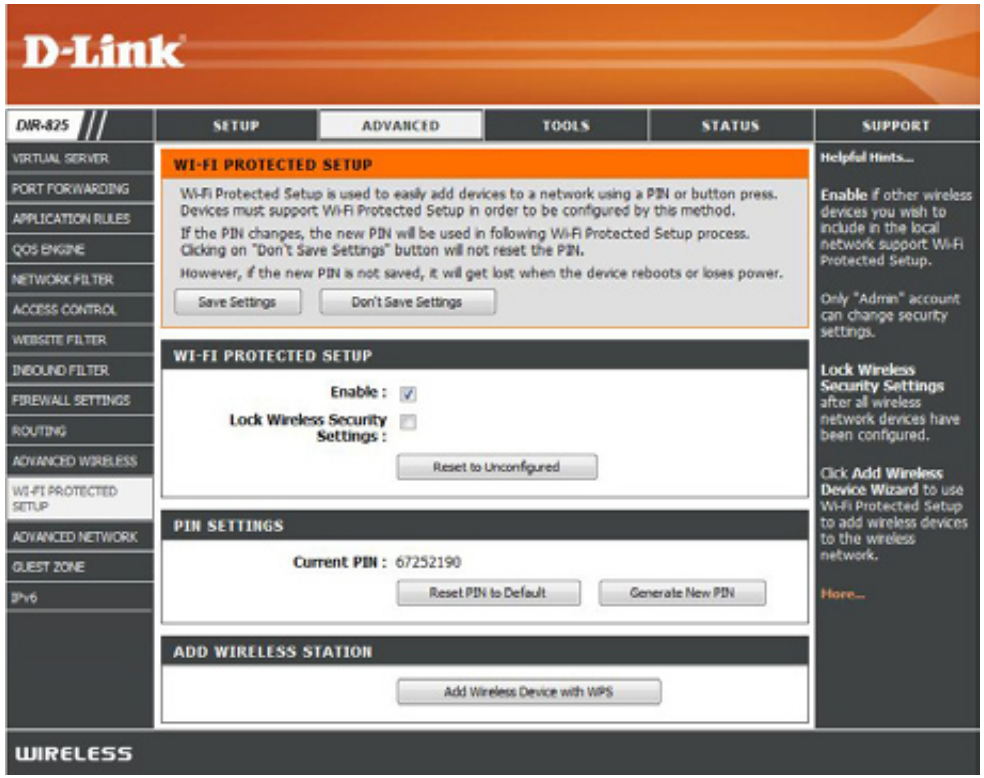
WLAN Partition: Enable this option to prevent associated wireless clients from communicating with each other.

WMM Function: WMM is QoS for your wireless network. This will improve the quality of video and voice applications for your wireless clients.

Short GI: Check this box to reduce the guard interval time therefore increasing the data capacity. However, it's less reliable and may create higher data loss.

Wi-Fi Protected Setup (WPS)

Wi-Fi Protected Setup (WPS) System is a simplified method for securing your wireless network during the “Initial setup” as well as the “Add New Device” processes. The Wi-Fi Alliance (WFA) has certified it across different products as well as manufactures. The process is just as easy, as depressing a button for the Push-Button Method or correctly entering the 8-digit code for the Pin-Code Method. The time reduction in setup and ease of use are quite beneficial, while the highest wireless Security setting of WPA2 is automatically used.


D-Link
DIR-825
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
VIRTUAL SERVER
PORT FORWARDING
APPLICATION RULES
QOS ENGINE
NETWORK FILTER
ACCESS CONTROL
WEBSITE FILTER
INBOUND FILTER
FIREWALL SETTINGS
ROUTING
ADVANCED WIRELESS
WI-FI PROTECTED SETUP
ADVANCED NETWORK
GUEST ZONE
IPv6
WI-FI PROTECTED SETUP
Wi-Fi Protected Setup is used to easily add devices to a network using a PIN or button press. Devices must support Wi-Fi Protected Setup in order to be configured by this method.
If the PIN changes, the new PIN will be used in following Wi-Fi Protected Setup process. Clicking on "Don't Save Settings" button will not reset the PIN.
However, if the new PIN is not saved, it will get lost when the device reboots or loses power.
Save Settings
Don't Save Settings
WI-FI PROTECTED SETUP
Enable :
Lock Wireless Security Settings :
Reset to Unconfigured
PIN SETTINGS
Current PIN : 67252190
Reset PIN to Default
Generate New PIN
ADD WIRELESS STATION
Add Wireless Device with WPS
Helpful Hints...
Enable if other wireless devices you wish to include in the local network support Wi-Fi Protected Setup.
Only "Admin" account can change security settings.
Lock Wireless Security Settings after all wireless network devices have been configured.
Click Add Wireless Device Wizard to use Wi-Fi Protected Setup to add wireless devices to the wireless network.
More...
WIRELESS

Enable: Enable the Wi-Fi Protected Setup feature.

Lock Wireless Security Settings: Locking the wireless security settings prevents the settings from being changed by the Wi-Fi Protected Setup feature of the router. Devices can still be added to the network using Wi-Fi Protected Setup. However, the settings of the network will not change once this option is checked.

PIN Settings: A PIN is a unique number that can be used to add the router to an existing network or to create a new network. The default PIN may be printed on the bottom of the router. For extra security, a new PIN can be generated. You can restore the default PIN at any time. Only the Administrator (“admin” account) can change or reset the PIN.

Current PIN: Shows the current value of the router’s PIN.

Reset PIN to Default: Restore the default PIN of the router.

Generate New PIN: Create a random number that is a valid PIN. This becomes the router’s PIN. You can then copy this PIN to the user interface of the registrar.

Add Wireless Station: This Wizard helps you add wireless devices to the wireless network.

The wizard will either display the wireless network settings to guide you through manual configuration, prompt you to enter the PIN for the device, or ask you to press the configuration button on the device. If the device supports Wi-Fi Protected Setup and has a configuration button, you can add it to the network by pressing the configuration button on the device and then the on the router within 60 seconds. The status LED on the router will flash three times if the device has been successfully added to the network.

There are several ways to add a wireless device to your network. A “registrar” controls access to the wireless network. A registrar only allows devices onto the wireless network if you have entered the PIN, or pressed a special Wi-Fi Protected Setup button on the device. The router acts as a registrar for the network, although other devices may act as a registrar as well.

Add Wireless Device Wizard: Start the wizard.

Advanced Network Settings

Enable UPnP: To use the Universal Plug and Play (UPnP™) feature click on **Enabled**. UPNP provides compatibility with networking equipment, software and peripherals.

WAN Ping: Unchecking the box will not allow the DIR-825 to respond to pings. Blocking the Ping may provide some extra security from hackers. Check the box to allow the Internet port to be “pinged”.

WAN Ping Inbound Filter: Select from the drop-down menu if you would like to apply the Inbound Filter to the WAN ping. Refer to page 46 for more information regarding Inbound Filter.

WAN Port Speed: You may set the port speed of the Internet port to 10Mbps, 100Mbps, or auto. Some older cable or DSL modems may require you to set the port speed to 10Mbps.

Multicast streams: Check the box to allow multicast traffic to pass through the router from the Internet.

D-Link
DIR-825
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
VIRTUAL SERVER
PORT FORWARDING
APPLICATION RULES
QOS ENGINE
NETWORK FILTER
ACCESS CONTROL
WEBSITE FILTER
INBOUND FILTER
FIREWALL SETTINGS
ADVANCED WIRELESS
GUEST ZONE
WI-FI PROTECTED SETUP
ADVANCED NETWORK
GUEST ZONE
IPv6
ADVANCED NETWORK
If you are not familiar with these Advanced Network settings, please read the help section before attempting to modify these settings.
Save Settings
Don't Save Settings
UPNP
Universal Plug and Play (UPnP) supports peer-to-peer Plug and Play functionality for network devices.
Enable UPnP :
WAN PING
If you enable this feature, the WAN port of your router will respond to ping requests from the Internet that are sent to the WAN IP Address.
Enable WAN Ping Respond :
WAN Ping Inbound Filter :
Allow All
Details :
Allow_All
WAN PORT SPEED
WAN Port Speed :
10/100Mbps Auto
MULTICAST STREAMS
Enable Multicast Streams :
Helpful Hints...
UPnP helps other UPnP LAN hosts interoperate with the router. Leave the UPnP option enabled as long as the LAN has other UPnP applications.
For added security, it is recommended that you disable the WAN Ping Respond option. Ping is often used by malicious Internet users to locate active networks or PCs.
The WAN speed is usually detected automatically. If you are having problems connecting to the WAN, try selecting the speed manually.
If you are having trouble receiving multicast streams from the Internet, make sure the Multicast Streams option is enabled.
More...

Guest Zone

The Guest Zone feature will allow you to create temporary zones that can be used by guests to access the Internet. These zones will be separate from your main wireless network. You may configure different zones for the 2.4GHz and 5.0GHz wireless bands.

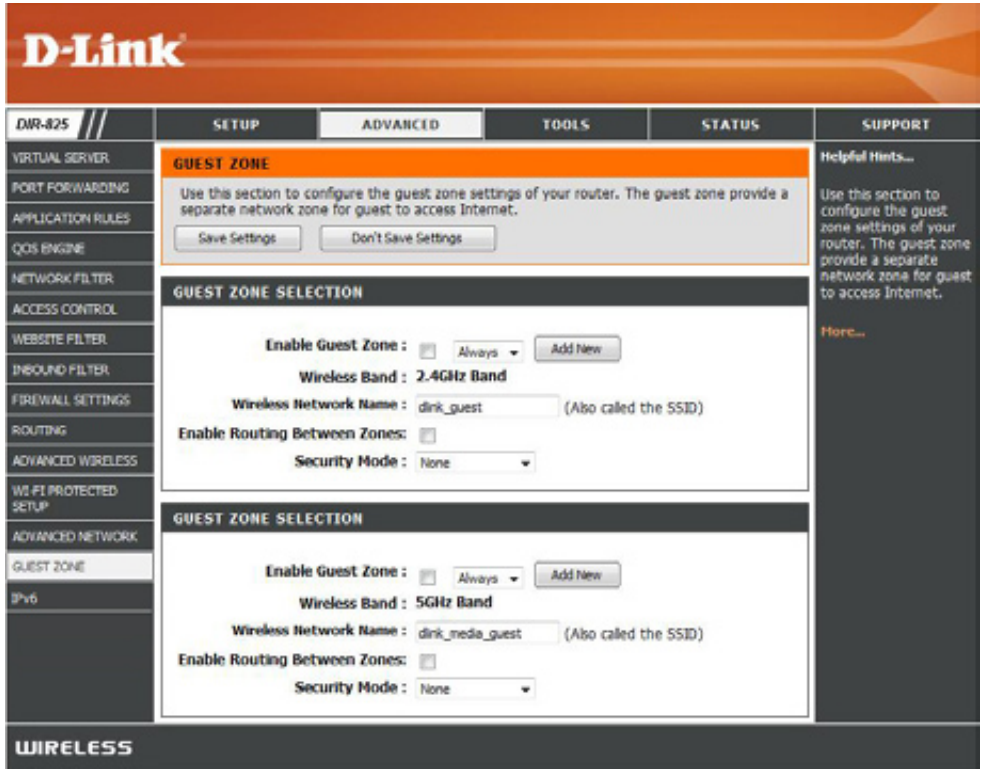
Enable Guest Zone: Check to enable the Guest Zone feature.

Schedule: The schedule of time when the Guest Zone will be active. The schedule may be set to Always, which will allow the particular service to always be enabled. You can create your own times in the **Tools** > **Schedules** section.

Wireless Network Name: Enter a wireless network name (SSID) that is different from your main wireless network.

Enable Routing Between Zones: Check to allow network connectivity between the different zones created.

Security Mode: Select the type of security or encryption you would like to enable for the guest zone.

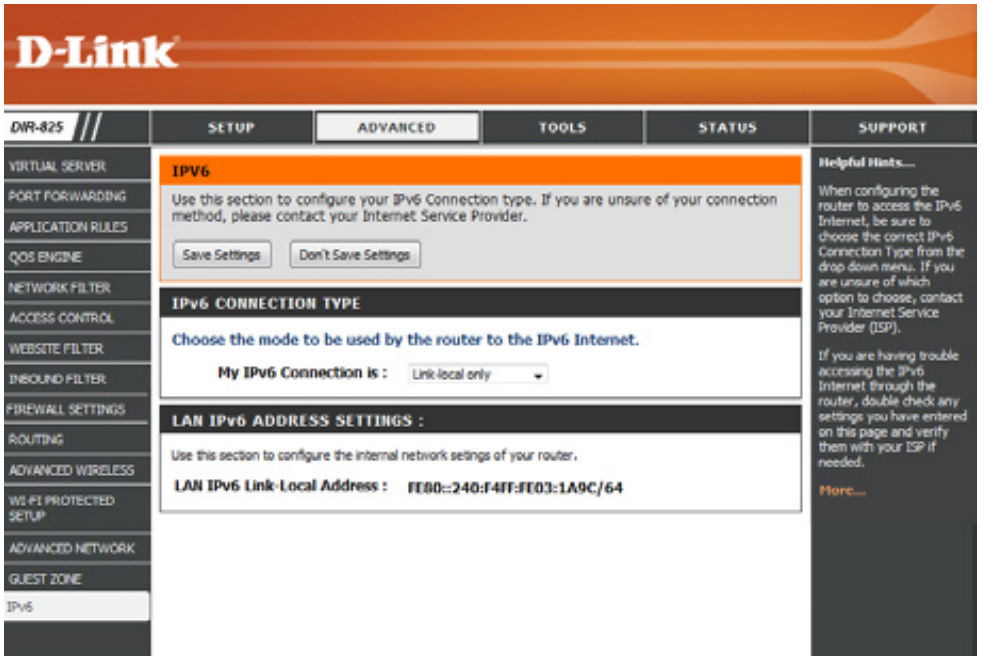


IPV6

Link-Local Connectivity

My IPv6 Connection: Select **Link-Local Only** from the drop-down menu.

LAN IPv6 Address Settings: Displays the IPv6 address of the router.


D-Link
DIR-825
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
VIRTUAL SERVER
PORT FORWARDING
APPLICATION RULES
QOS ENGINE
NETWORK FILTER
ACCESS CONTROL
WEBSITE FILTER
INBOUND FILTER
FIREWALL SETTINGS
ROUTING
ADVANCED WIRELESS
WI-FI PROTECTED SETUP
ADVANCED NETWORK
GUEST ZONE
IPv6
IPV6
Use this section to configure your IPv6 Connection type. If you are unsure of your connection method, please contact your Internet Service Provider.
Save Settings
Don't Save Settings
IPv6 CONNECTION TYPE
Choose the mode to be used by the router to the IPv6 Internet.
My IPv6 Connection is :
Link-local only
LAN IPv6 ADDRESS SETTINGS :
Use this section to configure the internal network settings of your router.
LAN IPv6 Link-Local Address :
FE80::240:F4FF:FE03:1A9C/64
Helpful Hints...
When configuring the router to access the IPv6 Internet, be sure to choose the correct IPv6 Connection Type from the drop down menu. If you are unsure of which option to choose, contact your Internet Service Provider (ISP).
If you are having trouble accessing the IPv6 Internet through the router, double check any settings you have entered on this page and verify them with your ISP if needed.
More...

Static IPv6 (Stateful)

My IPv6 Connection: Select **Static IPv6** from the drop-down menu.

WAN IPv6 Address Settings: Enter the address settings supplied by your Internet provider (ISP).

LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

LAN Link-Local Address: Displays the Router's LAN Link-Local Address.

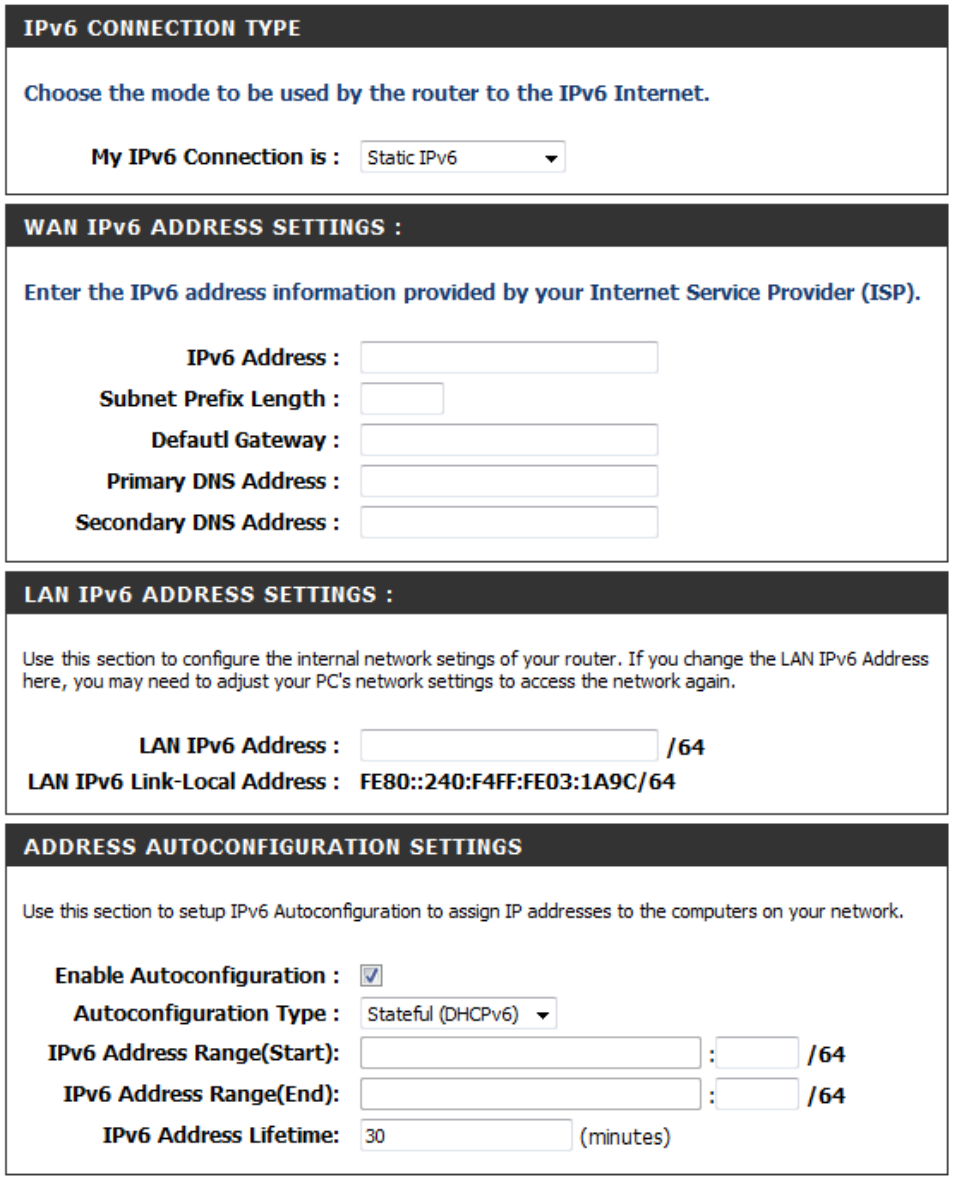
Enable Autoconfiguration: Check to enable the Autoconfiguration feature.

Autoconfiguration Type: Select **Stateful (DHCPv6)** or **Stateless**. Refer to the next page for Stateless.

IPv6 Address Range Start: Enter the start IPv6 Address for the DHCPv6 range for your local computers.

IPv6 Address Range End: Enter the end IPv6 Address for the DHCPv6 range for your local computers.

IPv6 Address Lifetime: Enter the IPv6 Address Lifetime (in minutes).


IPV6 CONNECTION TYPE
Choose the mode to be used by the router to the IPv6 Internet.
My IPv6 Connection is :
Static IPv6
WAN IPV6 ADDRESS SETTINGS :
Enter the IPv6 address information provided by your Internet Service Provider (ISP).
IPv6 Address :
Subnet Prefix Length :
Defautl Gateway :
Primary DNS Address :
Secondary DNS Address :
LAN IPV6 ADDRESS SETTINGS :
Use this section to configure the internal network setings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC's network settings to access the network again.
LAN IPv6 Address :
/64
LAN IPv6 Link-Local Address :
FE80::240:F4FF:FE03:1A9C/64
ADDRESS AUTOCONFIGURATION SETTINGS
Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.
Enable Autoconfiguration :
Autoconfiguration Type :
Stateful (DHCPv6)
IPv6 Address Range(Start):
/64
IPv6 Address Range(End):
/64
IPv6 Address Lifetime:
30
(minutes)

Static IPv6 (Stateless)

My IPv6 Connection: Select **Static IPv6** from the drop-down menu.

WAN IPv6 Address Settings: Enter the address settings supplied by your Internet provider (ISP).

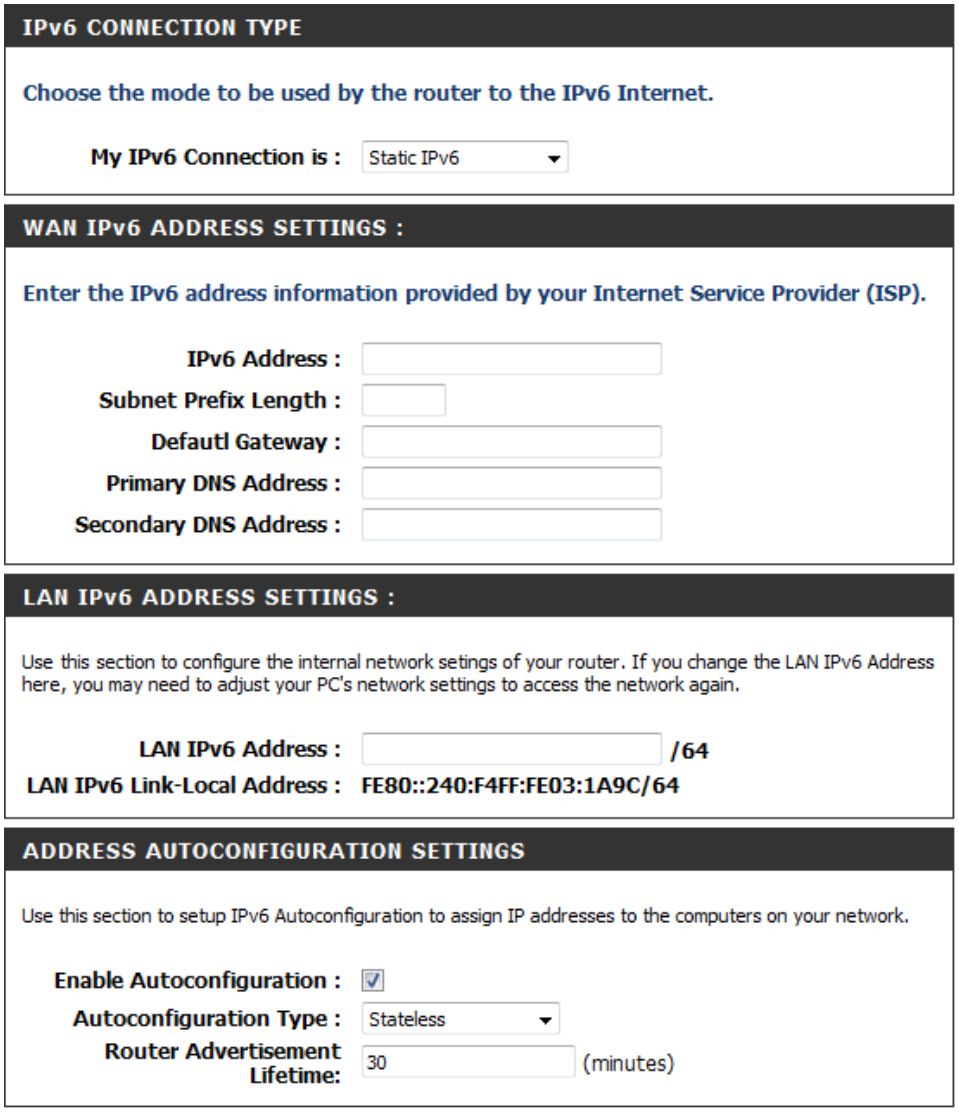
LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

LAN Link-Local Address: Displays the Router's LAN Link-Local Address.

Enable Autoconfiguration: Check to enable the Autoconfiguration feature.

Autoconfiguration Type: Select **Stateless**. Refer to the previous page for Stateful.

Router Advertisement Lifetime: Enter the Router Advertisement Lifetime (in minutes).


IPv6 CONNECTION TYPE
Choose the mode to be used by the router to the IPv6 Internet.
My IPv6 Connection is :
Static IPv6
WAN IPv6 ADDRESS SETTINGS :
Enter the IPv6 address information provided by your Internet Service Provider (ISP).
IPv6 Address :
Subnet Prefix Length :
Defautl Gateway :
Primary DNS Address :
Secondary DNS Address :
LAN IPv6 ADDRESS SETTINGS :
Use this section to configure the internal network setings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC's network settings to access the network again.
LAN IPv6 Address :
/64
LAN IPv6 Link-Local Address :
FE80::240:F4FF:FE03:1A9C/64
ADDRESS AUTOCONFIGURATION SETTINGS
Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.
Enable Autoconfiguration :
Autoconfiguration Type :
Stateless
Router Advertisement Lifetime:
30
(minutes)

DHCPv6 (Stateful)

My IPv6 Connection: Select **DHCPv6** from the drop-down menu.

IPv6 DNS Settings: Select either **Obtain DNS server address automatically** or **Use the following DNS Address**.

Primary/Secondary DNS Address: Enter the primary and secondary DNS server addresses.

LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

LAN Link-Local Address: Displays the Router's LAN Link-Local Address.

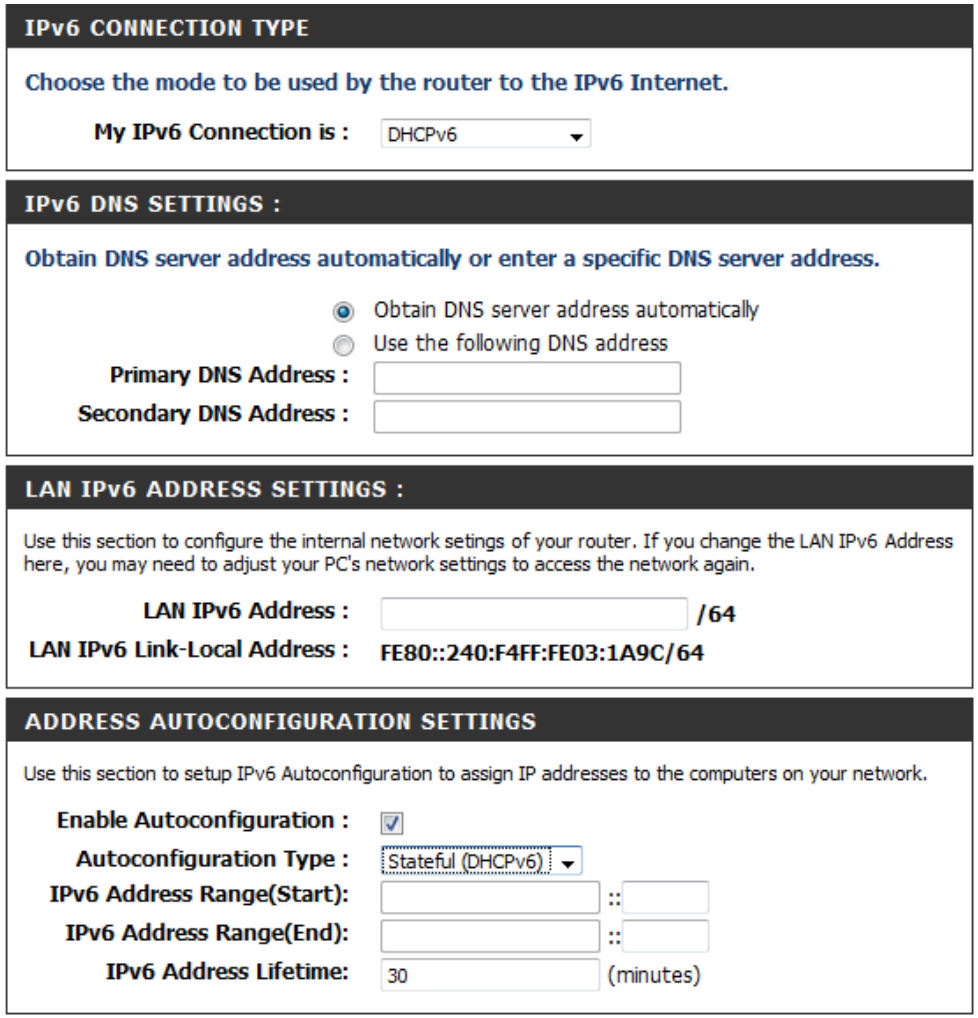
Enable Autoconfiguration: Check to enable the Autoconfiguration feature.

Autoconfiguration Type: Select **Stateful (DHCPv6)** or **Stateless**. Refer to the next page for Stateless.

IPv6 Address Range Start: Enter the start IPv6 Address for the DHCPv6 range for your local computers.

IPv6 Address Range End: Enter the end IPv6 Address for the DHCPv6 range for your local computers.

IPv6 Address Lifetime: Enter the IPv6 Address Lifetime (in minutes).


IPv6 CONNECTION TYPE
Choose the mode to be used by the router to the IPv6 Internet.
My IPv6 Connection is :
DHCPv6
IPv6 DNS SETTINGS :
Obtain DNS server address automatically or enter a specific DNS server address.
Obtain DNS server address automatically
Use the following DNS address
Primary DNS Address :
Secondary DNS Address :
LAN IPv6 ADDRESS SETTINGS :
Use this section to configure the internal network setings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC's network settings to access the network again.
LAN IPv6 Address :
/64
LAN IPv6 Link-Local Address :
FE80::240:F4FF:FE03:1A9C/64
ADDRESS AUTOCONFIGURATION SETTINGS
Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.
Enable Autoconfiguration :
Autoconfiguration Type :
Stateful (DHCPv6)
IPv6 Address Range(Start):
IPv6 Address Range(End):
IPv6 Address Lifetime:
30
(minutes)

DHCPv6 (Stateless)

My IPv6 Connection: Select **DHCPv6** from the drop-down menu.

IPv6 DNS Settings: Select either **Obtain DNS server address automatically** or **Use the following DNS Address**.

Primary/Secondary DNS Address: Enter the primary and secondary DNS server addresses.

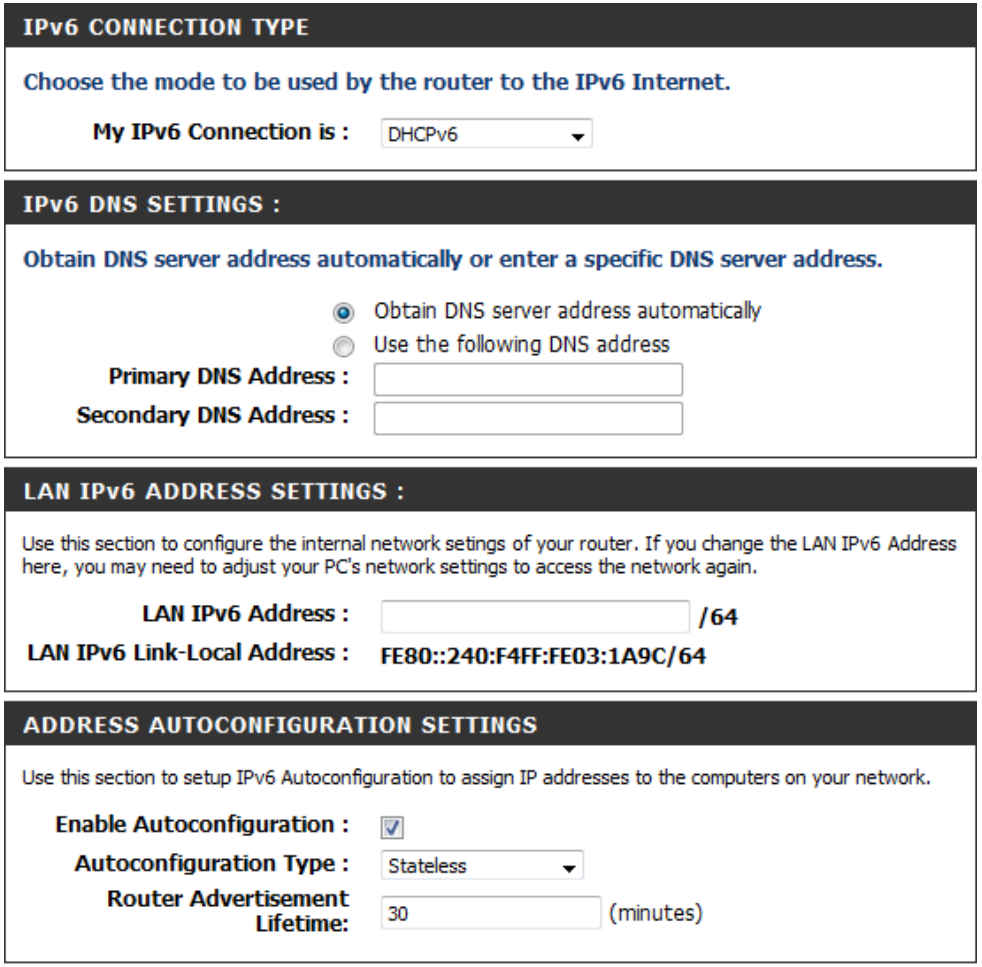
LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

LAN Link-Local Address: Displays the Router's LAN Link-Local Address.

Enable Autoconfiguration: Check to enable the Autoconfiguration feature.

Autoconfiguration Type: Select **Stateless**. Refer to the previous page for Stateful.

Router Advertisement Lifetime: Enter the Router Advertisement Lifetime (in minutes).


IPv6 CONNECTION TYPE
Choose the mode to be used by the router to the IPv6 Internet.
My IPv6 Connection is :
DHCPv6
IPv6 DNS SETTINGS :
Obtain DNS server address automatically or enter a specific DNS server address.
Obtain DNS server address automatically
Use the following DNS address
Primary DNS Address :
Secondary DNS Address :
LAN IPv6 ADDRESS SETTINGS :
Use this section to configure the internal network setings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC's network settings to access the network again.
LAN IPv6 Address :
/64
LAN IPv6 Link-Local Address :
FE80::240:F4FF:FE03:1A9C/64
ADDRESS AUTOCONFIGURATION SETTINGS
Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.
Enable Autoconfiguration :
Autoconfiguration Type :
Stateless
Router Advertisement Lifetime:
30
(minutes)

IPv6 over PPPoE (Stateful)

My IPv6 Connection: Select **PPPoE** from the drop-down menu.

PPPoE: Enter the PPPoE account settings supplied by your Internet provider (ISP).

Address Mode: Select **Static** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses. In most cases, select **Dynamic**.

IP Address: Enter the IP address (Static PPPoE only).

User Name: Enter your PPPoE user name.

Password: Enter your PPPoE password and then retype the password in the next box.

Service Name: Enter the ISP Service Name (optional).

Reconnection Mode: Select either **Always-on**, **On-Demand**, or **Manual**.

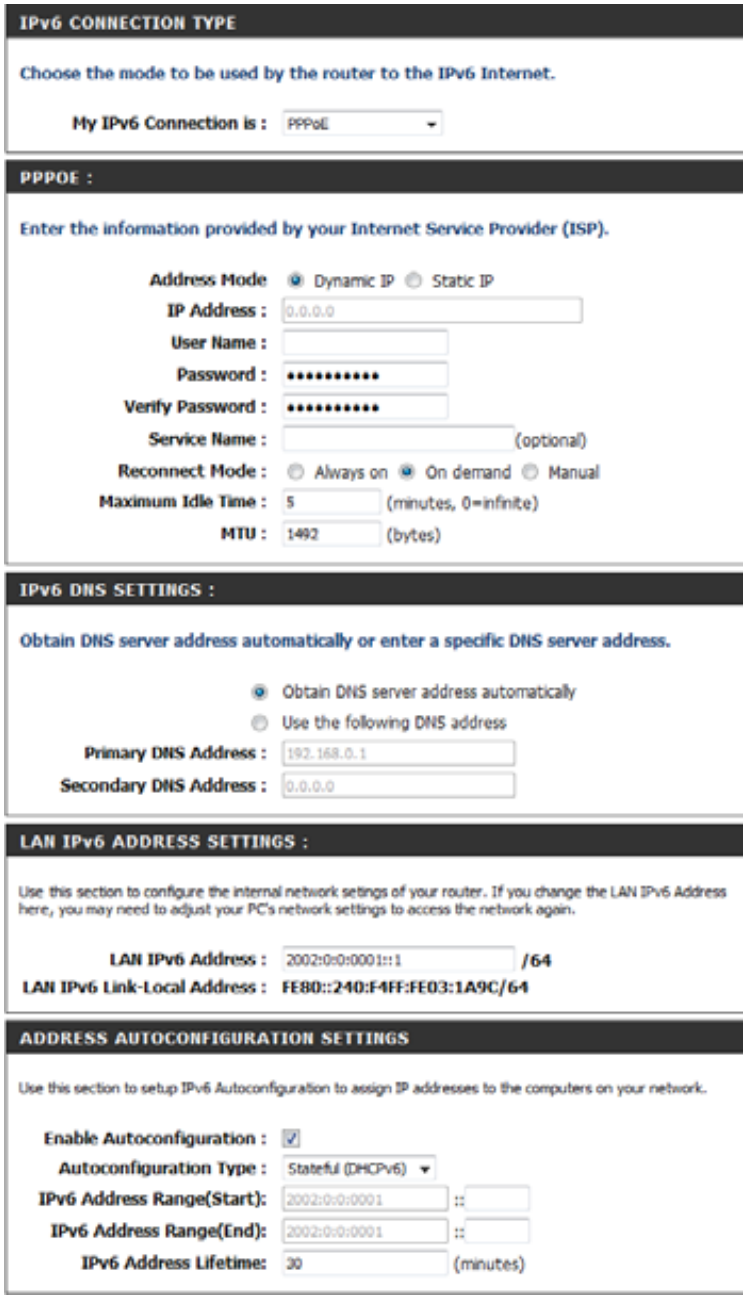
Maximum Idle Time: Enter a maximum idle time during which the Internet connection is maintained during inactivity. To disable this feature, enable Auto-reconnect.

IPv6 DNS Settings: Select either **Obtain DNS server address automatically** or **Use the following DNS Address**.

Primary/Secondary DNS Address: Enter the primary and secondary DNS server addresses.

LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

LAN Link-Local Address: Displays the Router's LAN Link-Local Address.


IPv6 CONNECTION TYPE
Choose the mode to be used by the router to the IPv6 Internet.
My IPv6 Connection is : PPPoE
PPPOE :
Enter the information provided by your Internet Service Provider (ISP).
Address Mode Dynamic IP Static IP
IP Address : 0.0.0.0
User Name :
Password : ••••••••••
Verify Password : ••••••••••
Service Name : (optional)
Reconnect Mode : Always on On demand Manual
Maximum Idle Time : 5 (minutes, 0=infinite)
MTU : 1492 (bytes)
IPv6 DNS SETTINGS :
Obtain DNS server address automatically or enter a specific DNS server address.
Obtain DNS server address automatically
Use the following DNS address
Primary DNS Address : 192.168.0.1
Secondary DNS Address : 0.0.0.0
LAN IPv6 ADDRESS SETTINGS :
Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC's network settings to access the network again.
LAN IPv6 Address : 2002:0:0:0001::1 /64
LAN IPv6 Link-Local Address : FE80::240:F4FF:FE03:1A9C/64
ADDRESS AUTOCONFIGURATION SETTINGS
Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.
Enable Autoconfiguration :
Autoconfiguration Type : Stateful (DHCPv6)
IPv6 Address Range(Start): 2002:0:0:0001 ::
IPv6 Address Range(End): 2002:0:0:0001 ::
IPv6 Address Lifetime: 30 (minutes)

Enable Autoconfiguration: Check to enable the Autoconfiguration feature.

Autoconfiguration Type: Select **Stateful (DHCPv6)** or **Stateless**. Refer to the next page for Stateless.

IPv6 Address Range Start: Enter the start IPv6 Address for the DHCPv6 range for your local computers.

IPv6 Address Range End: Enter the end IPv6 Address for the DHCPv6 range for your local computers.

IPv6 Address Lifetime: Enter the IPv6 Address Lifetime (in minutes).

IPv6 over PPPoE (Stateless)

My IPv6 Connection: Select **PPPoE** from the drop-down menu.

PPPoE: Enter the PPPoE account settings supplied by your Internet provider (ISP).

Address Mode: Select **Static** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses. In most cases, select **Dynamic**.

IP Address: Enter the IP address (Static PPPoE only).

User Name: Enter your PPPoE user name.

Password: Enter your PPPoE password and then retype the password in the next box.

Service Name: Enter the ISP Service Name (optional).

Reconnection Mode: Select either **Always-on**, **On-Demand**, or **Manual**.

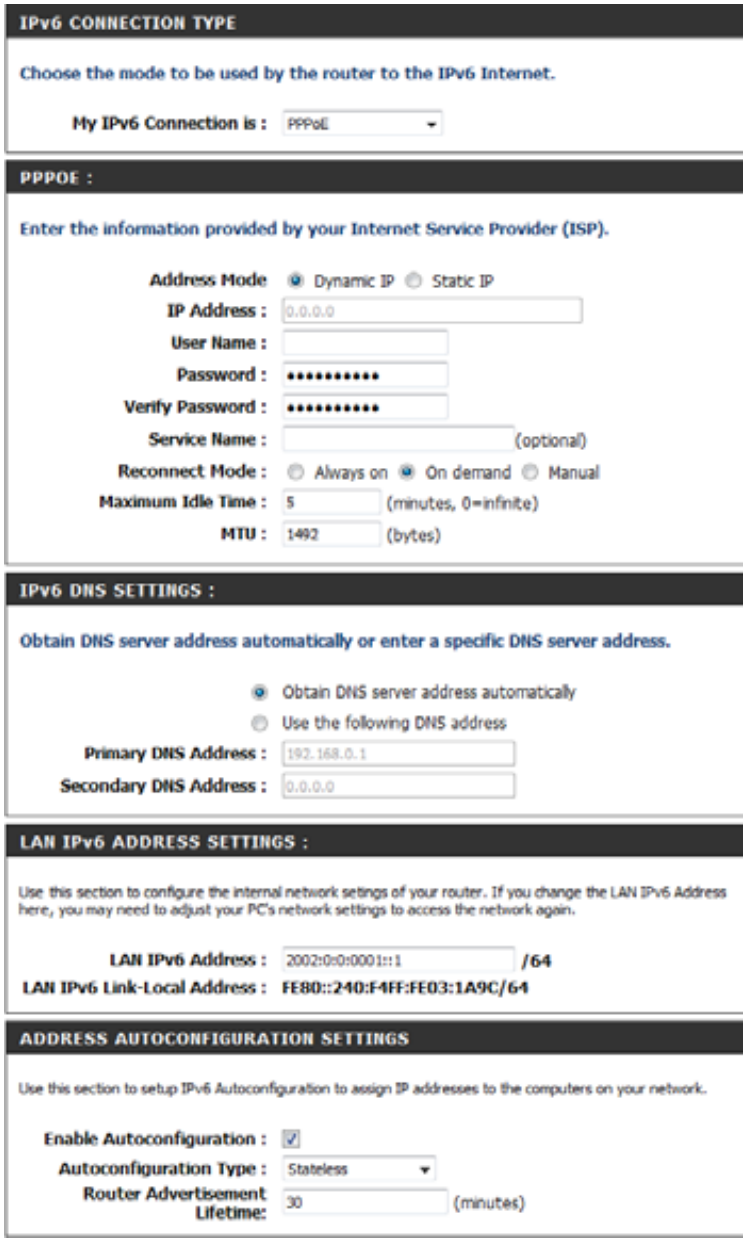
Maximum Idle Time: Enter a maximum idle time during which the Internet connection is maintained during inactivity. To disable this feature, enable Auto-reconnect.

IPv6 DNS Settings: Select either **Obtain DNS server address automatically** or **Use the following DNS Address**.

Primary/Secondary DNS Address: Enter the primary and secondary DNS server addresses.

LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

LAN Link-Local Address: Displays the Router's LAN Link-Local Address.


IPv6 CONNECTION TYPE
Choose the mode to be used by the router to the IPv6 Internet.
My IPv6 Connection is : PPPoE
PPPOE :
Enter the information provided by your Internet Service Provider (ISP).
Address Mode Dynamic IP Static IP
IP Address : 0.0.0.0
User Name :
Password : ••••••••••
Verify Password : ••••••••••
Service Name : (optional)
Reconnect Mode : Always on On demand Manual
Maximum Idle Time : 5 (minutes, 0=infinite)
MTU : 1492 (bytes)
IPv6 DNS SETTINGS :
Obtain DNS server address automatically or enter a specific DNS server address.
Obtain DNS server address automatically
Use the following DNS address
Primary DNS Address : 192.168.0.1
Secondary DNS Address : 0.0.0.0
LAN IPv6 ADDRESS SETTINGS :
Use this section to configure the internal network settings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC's network settings to access the network again.
LAN IPv6 Address : 2002:0:0:0001::1 /64
LAN IPv6 Link-Local Address : FE80::240:F4FF:FE03:1A9C/64
ADDRESS AUTOCONFIGURATION SETTINGS
Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.
Enable Autoconfiguration :
Autoconfiguration Type : Stateless
Router Advertisement Lifetime: 30 (minutes)

Enable Autoconfiguration: Check to enable the Autoconfiguration feature.

Autoconfiguration Type: Select **Stateful (DHCPv6)** or **Stateless**.

Router Advertisement Lifetime: Enter the Router Advertisement Lifetime (in minutes).

6 to 4 Tunneling (Stateful)

My IPv6 Connection: Select **6 to 4** from the drop-down menu.

6 to 4 Settings: Enter the IPv6 settings supplied by your Internet provider (ISP).

Primary/Secondary DNS Address: Enter the primary and secondary DNS server addresses.

LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

LAN Link-Local Address: Displays the Router's LAN Link-Local Address.

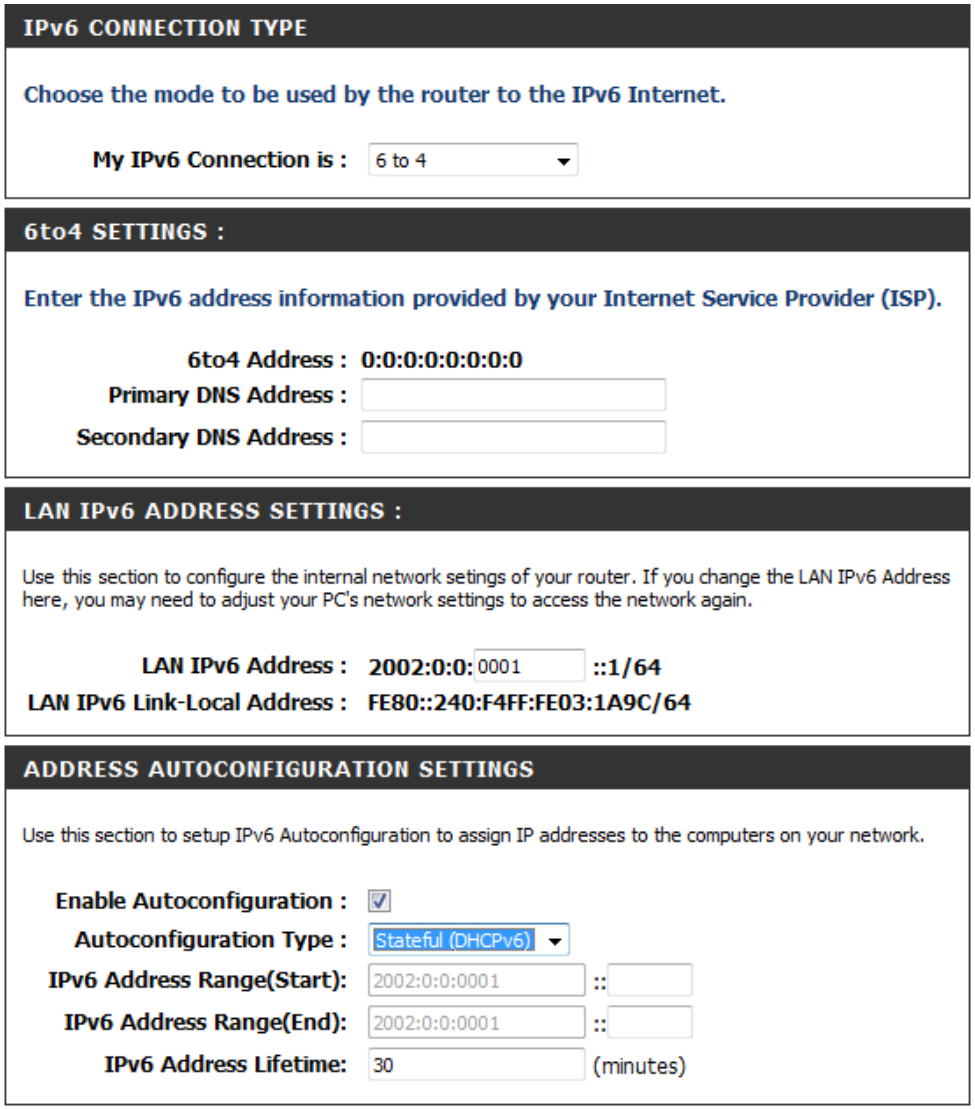
Enable Autoconfiguration: Check to enable the Autoconfiguration feature.

Autoconfiguration Type: Select **Stateful (DHCPv6)** or **Stateless**. Refer to the next page for Stateless.

IPv6 Address Range Start: Enter the start IPv6 Address for the DHCPv6 range for your local computers.

IPv6 Address Range End: Enter the end IPv6 Address for the DHCPv6 range for your local computers.

IPv6 Address Lifetime: Enter the IPv6 Address Lifetime (in minutes).


IPV6 CONNECTION TYPE
Choose the mode to be used by the router to the IPv6 Internet.
My IPv6 Connection is :
6 to 4
6TO4 SETTINGS :
Enter the IPv6 address information provided by your Internet Service Provider (ISP).
6to4 Address : 0:0:0:0:0:0:0:0
Primary DNS Address :
Secondary DNS Address :
LAN IPV6 ADDRESS SETTINGS :
Use this section to configure the internal network setings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC's network settings to access the network again.
LAN IPv6 Address : 2002:0:0: 0001 ::1/64
LAN IPv6 Link-Local Address : FE80::240:F4FF:FE03:1A9C/64
ADDRESS AUTOCONFIGURATION SETTINGS
Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.
Enable Autoconfiguration :
Autoconfiguration Type :
Stateful (DHCPv6)
IPv6 Address Range(Start):
2002:0:0:0001
::
IPv6 Address Range(End):
2002:0:0:0001
::
IPv6 Address Lifetime:
30
(minutes)

6 to 4 Tunneling (Stateless)

My IPv6 Connection: Select **6 to 4** from the drop-down menu.

6 to 4 Settings: Enter the IPv6 settings supplied by your Internet provider (ISP).

Primary/Secondary DNS Address: Enter the primary and secondary DNS server addresses.

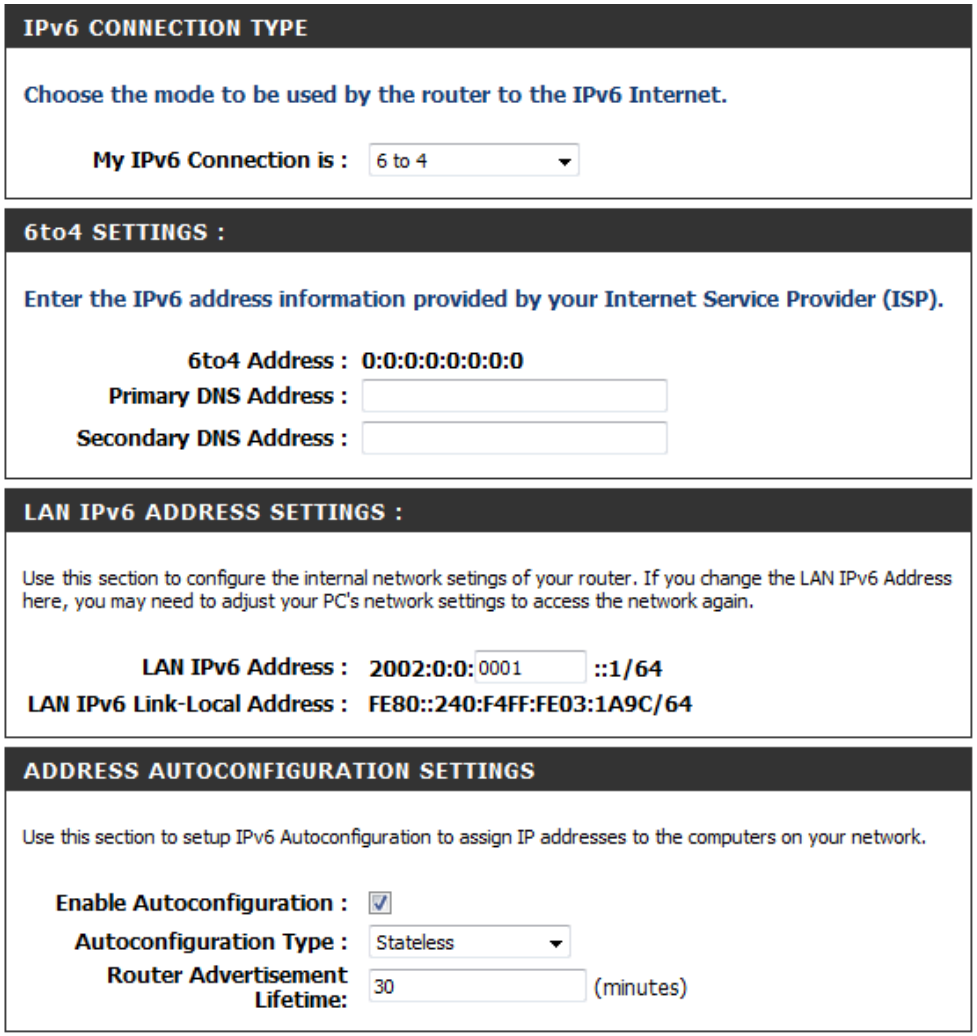
LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

LAN Link-Local Address: Displays the Router's LAN Link-Local Address.

Enable Autoconfiguration: Check to enable the Autoconfiguration feature.

Autoconfiguration Type: Select **Stateless**. Refer to the previous page for Stateful.

Router Advertisement Lifetime: Enter the Router Advertisement Lifetime (in minutes).


IPv6 CONNECTION TYPE
Choose the mode to be used by the router to the IPv6 Internet.
My IPv6 Connection is :
6 to 4
6to4 SETTINGS :
Enter the IPv6 address information provided by your Internet Service Provider (ISP).
6to4 Address : 0:0:0:0:0:0:0:0
Primary DNS Address :
Secondary DNS Address :
LAN IPv6 ADDRESS SETTINGS :
Use this section to configure the internal network setings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC's network settings to access the network again.
LAN IPv6 Address : 2002:0:0: 0001 ::1/64
LAN IPv6 Link-Local Address : FE80::240:F4FF:FE03:1A9C/64
ADDRESS AUTOCONFIGURATION SETTINGS
Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.
Enable Autoconfiguration :
Autoconfiguration Type :
Stateless
Router Advertisement Lifetime:
30
(minutes)

IPv6 in IPv4 Tunneling (Stateful)

My IPv6 Connection: Select **IPv6 in IPv4 Tunnel** from the drop-down menu.

IPv6 in IPv4 Tunnel Settings: Enter the settings supplied by your Internet provider (ISP).

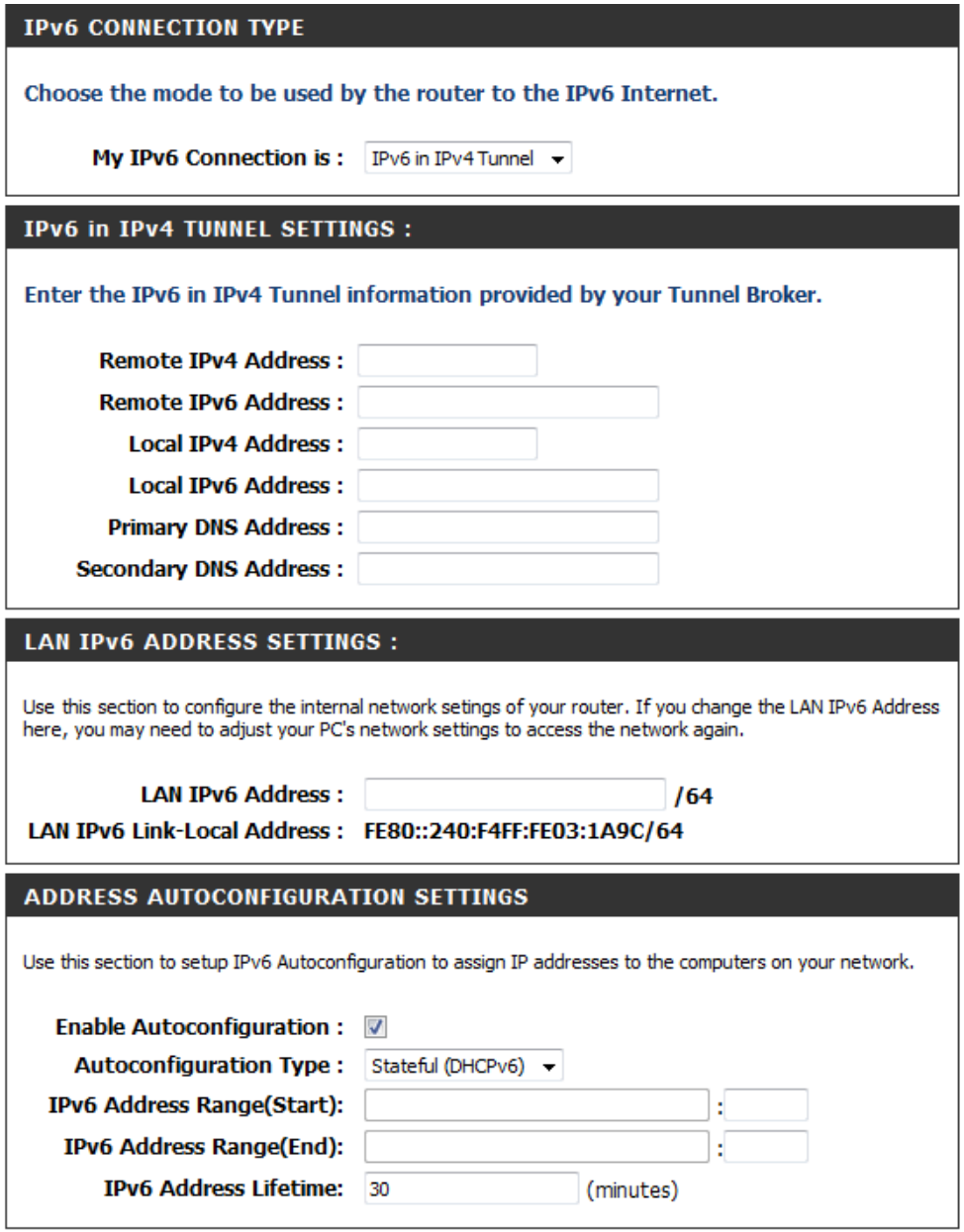
LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

LAN Link-Local Address: Displays the Router's LAN Link-Local Address.

Enable Autoconfiguration: Check to enable the Autoconfiguration feature.

Autoconfiguration Type: Select **Stateless**. Refer to the previous page for Stateful.

Router Advertisement Lifetime: Enter the Router Advertisement Lifetime (in minutes).


IPv6 CONNECTION TYPE
Choose the mode to be used by the router to the IPv6 Internet.
My IPv6 Connection is :
IPv6 in IPv4 Tunnel
IPv6 in IPv4 TUNNEL SETTINGS :
Enter the IPv6 in IPv4 Tunnel information provided by your Tunnel Broker.
Remote IPv4 Address :
Remote IPv6 Address :
Local IPv4 Address :
Local IPv6 Address :
Primary DNS Address :
Secondary DNS Address :
LAN IPv6 ADDRESS SETTINGS :
Use this section to configure the internal network setings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC's network settings to access the network again.
LAN IPv6 Address :
/64
LAN IPv6 Link-Local Address :
FE80::240:F4FF:FE03:1A9C/64
ADDRESS AUTOCONFIGURATION SETTINGS
Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.
Enable Autoconfiguration :
Autoconfiguration Type :
Stateful (DHCPv6)
IPv6 Address Range(Start):
IPv6 Address Range(End):
IPv6 Address Lifetime:
30
(minutes)

IPv6 in IPv4 Tunneling (Stateless)

My IPv6 Connection: Select **IPv6 in IPv4 Tunnel** from the drop-down menu.

IPv6 in IPv4 Tunnel Settings: Enter the settings supplied by your Internet provider (ISP).

LAN IPv6 Address: Enter the LAN (local) IPv6 address for the router.

LAN Link-Local Address: Displays the Router's LAN Link-Local Address.

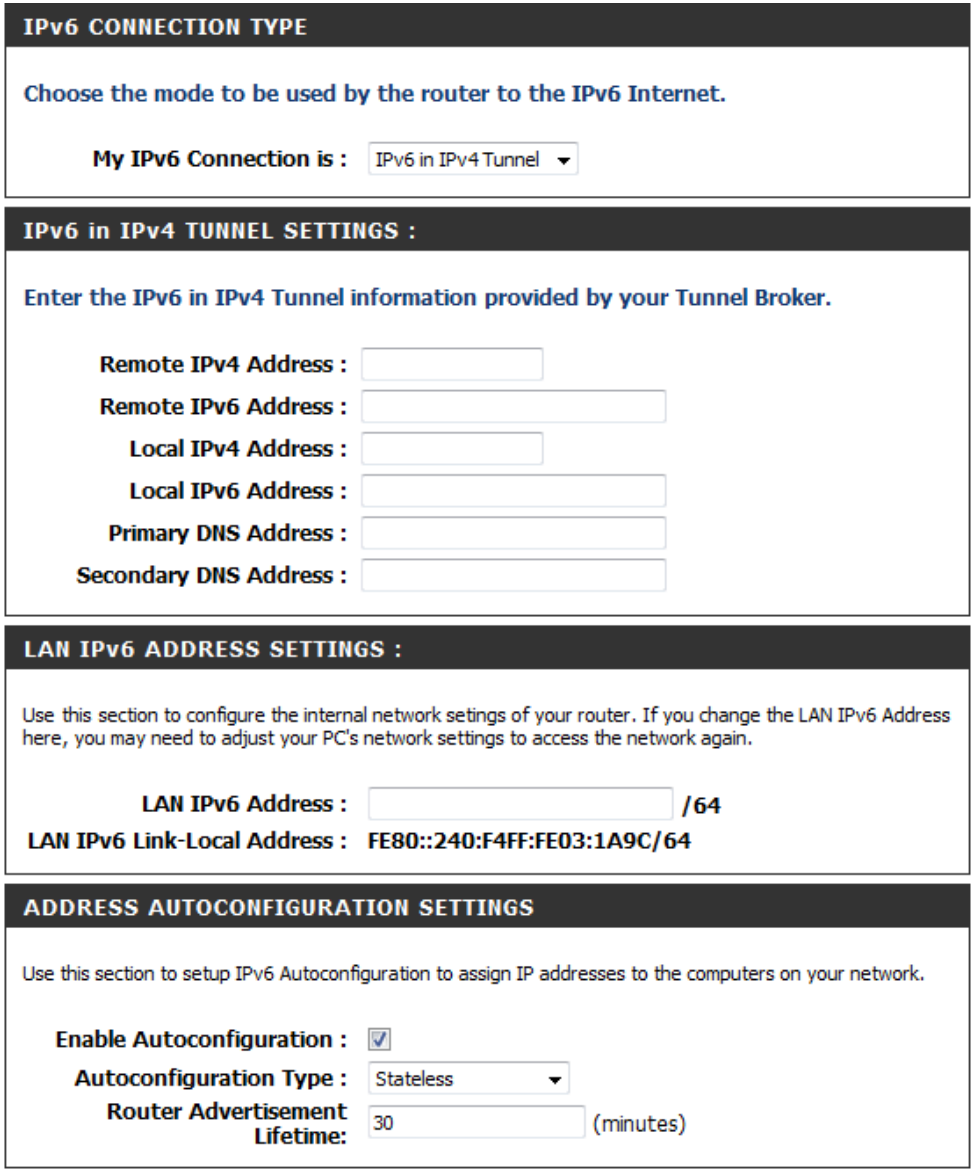
Enable Autoconfiguration: Check to enable the Autoconfiguration feature.

Autoconfiguration Type: Select **Stateful (DHCPv6)** or **Stateless**. Refer to the next page for Stateless.

IPv6 Address Range Start: Enter the start IPv6 Address for the DHCPv6 range for your local computers.

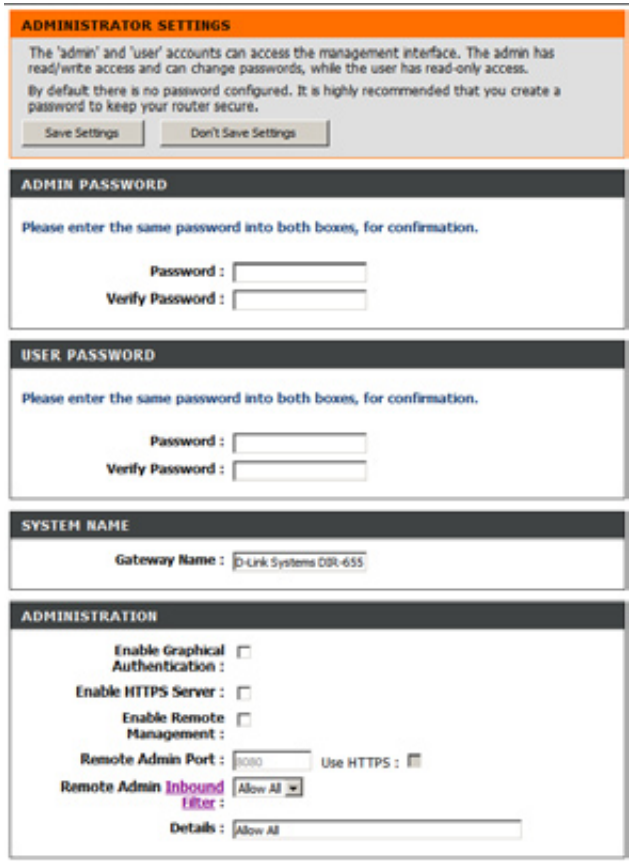
IPv6 Address Range End: Enter the end IPv6 Address for the DHCPv6 range for your local computers.

IPv6 Address Lifetime: Enter the IPv6 Address Lifetime (in minutes).


IPV6 CONNECTION TYPE
Choose the mode to be used by the router to the IPv6 Internet.
My IPv6 Connection is :
IPv6 in IPv4 Tunnel
IPV6 IN IPV4 TUNNEL SETTINGS :
Enter the IPv6 in IPv4 Tunnel information provided by your Tunnel Broker.
Remote IPv4 Address :
Remote IPv6 Address :
Local IPv4 Address :
Local IPv6 Address :
Primary DNS Address :
Secondary DNS Address :
LAN IPV6 ADDRESS SETTINGS :
Use this section to configure the internal network setings of your router. If you change the LAN IPv6 Address here, you may need to adjust your PC's network settings to access the network again.
LAN IPv6 Address :
/64
LAN IPv6 Link-Local Address :
FE80::240:F4FF:FE03:1A9C/64
ADDRESS AUTOCONFIGURATION SETTINGS
Use this section to setup IPv6 Autoconfiguration to assign IP addresses to the computers on your network.
Enable Autoconfiguration :
Autoconfiguration Type :
Stateless
Router Advertisement Lifetime:
30
(minutes)

Administrator Settings

This page will allow you to change the Administrator and User passwords. You can also enable Remote Management. There are two accounts that can access the management interface through the web browser. The accounts are admin and user. Admin has read/write access while user has read-only access. User can only view the settings but cannot make any changes. Only the admin account has the ability to change both admin and user account passwords.


ADMINISTRATOR SETTINGS
The 'admin' and 'user' accounts can access the management interface. The admin has read/write access and can change passwords, while the user has read-only access.
By default there is no password configured. It is highly recommended that you create a password to keep your router secure.
Save Settings
Don't Save Settings
ADMIN PASSWORD
Please enter the same password into both boxes, for confirmation.
Password :
Verify Password :
USER PASSWORD
Please enter the same password into both boxes, for confirmation.
Password :
Verify Password :
SYSTEM NAME
Gateway Name :
D-Link Systems DIR-655
ADMINISTRATION
Enable Graphical Authentication :
Enable HTTPS Server :
Enable Remote Management :
Remote Admin Port :
8080
Use HTTPS :
Remote Admin Inbound Filter :
Allow All
Details :
Allow All

Admin Password: Enter a new password for the Administrator Login Name. The administrator can make changes to the settings.

User Password: Enter the new password for the User login. If you login as the User, you can only see the settings, but cannot change them.

System Name: Enter a name for the DIR-825 router.

Enable Graphical Authentication: Enables a challenge-response test to require users to type letters or numbers from a distorted image displayed on the screen to prevent online hackers and unauthorized users from gaining access to your router's network settings.
Disclaimer: D-Link makes no warranty as to the availability, reliability, functionality and operation of the Advanced DNS service or its features.

Enable HTTPS Server: Check to enable HTTPS to connect to the router securely.

Enable Remote Management: Remote management allows the DIR-825 to be configured from the Internet by a web browser. A username and password is still required to access the Web-Management interface. In general, only a member of your network can browse the built-in web pages to perform Administrator tasks. This feature enables you to perform Administrator tasks from the remote (Internet) host.

Remote Admin Port: The port number used to access the DIR-825.
Example: http://x.x.x.x:8080 whereas x.x.x.x is the Internet IP address of the DIR-825 and 8080 is the port used for the Web Management interface. If you have enabled **HTTPS Server** and checked **Use HTTPS**, you must enter **https://** as part of the URL to access the router remotely.

Inbound Filter: This section will list any rules that are created. You may click the **Edit** icon to change the settings or enable/disable the rule, or click the **Delete** icon to remove the rule.

Details: This section will list any rules that are created. You may click the Edit icon to change the settings or enable/disable the rule, or click the Delete icon to remove the rule.

Time Settings

The Time Configuration option allows you to configure, update, and maintain the correct time on the internal system clock. From this section you can set the time zone that you are in and set the Time Server. Daylight Saving can also be configured to automatically adjust the time when needed.

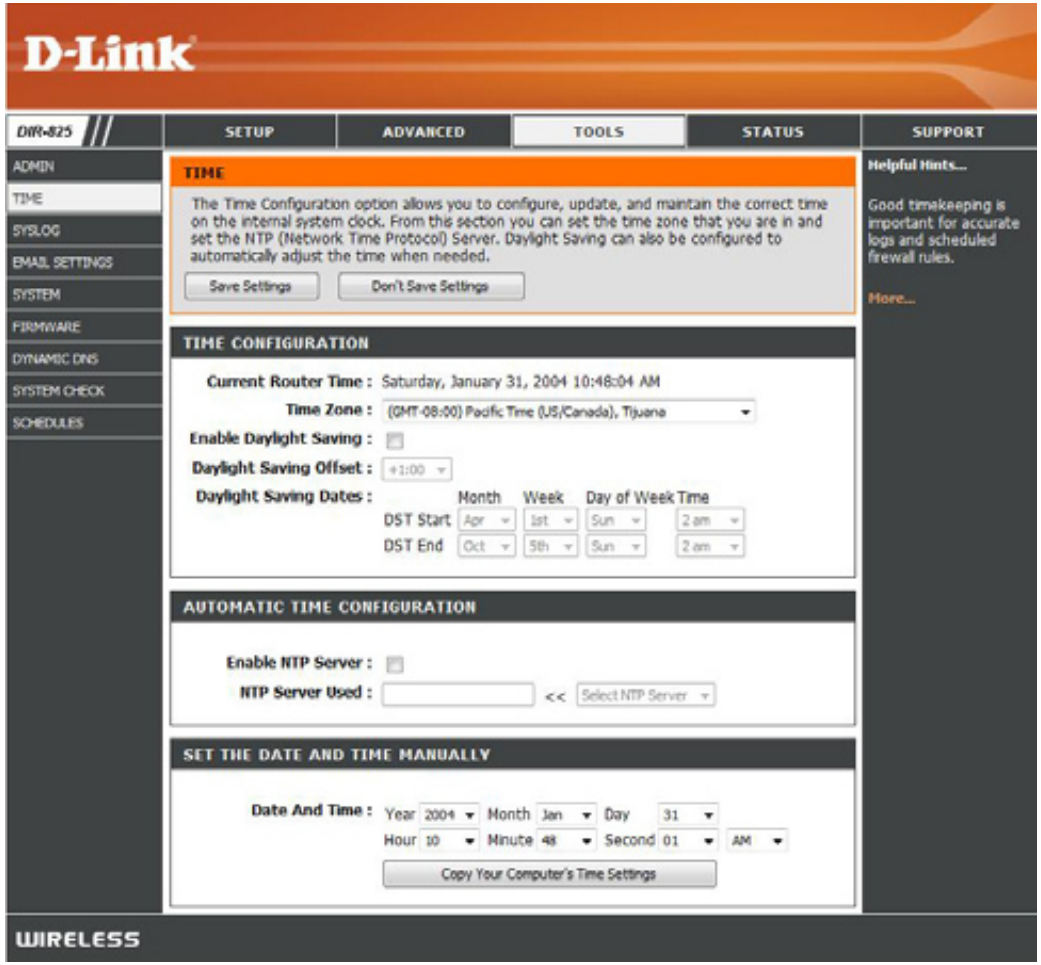
Time Zone: Select the Time Zone from the drop-down menu.

Daylight Saving: To select Daylight Saving time manually, select enabled or disabled, and enter a start date and an end date for daylight saving time.

Enable NTP Server: NTP is short for Network Time Protocol. NTP synchronizes computer clock times in a network of computers. Check this box to use a NTP server. This will only connect to a server on the Internet, not a local server.

NTP Server Used: Enter the NTP server or select one from the drop-down menu.

Manual: To manually input the time, enter the values in these fields for the Year, Month, Day, Hour, Minute, and Second and then click **Set Time**. You can also click **Copy Your Computer's Time Settings**.

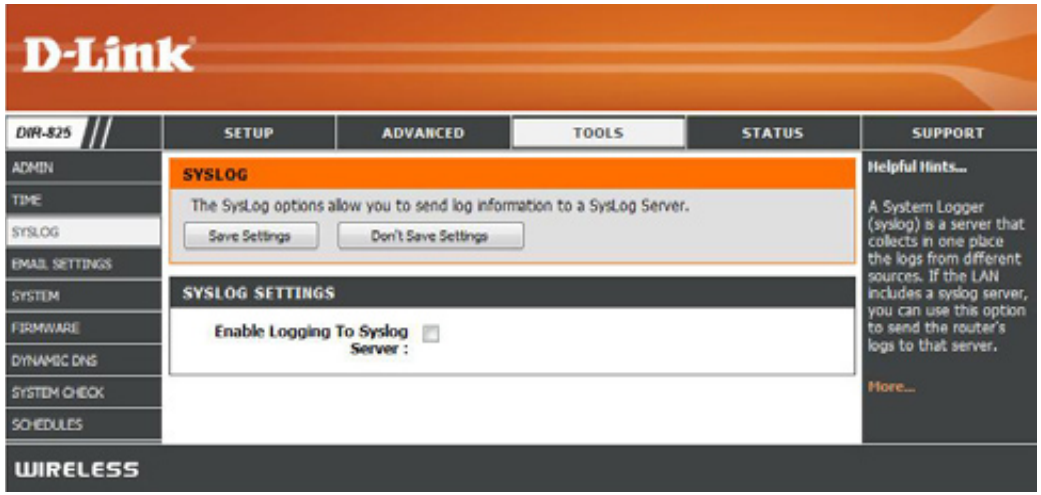

D-Link
DIR-825
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
ADMIN
TIME
SYSLOG
EMAIL SETTINGS
SYSTEM
FIRMWARE
DYNAMIC DNS
SYSTEM CHECK
SCHEDULES
TIME
The Time Configuration option allows you to configure, update, and maintain the correct time on the internal system clock. From this section you can set the time zone that you are in and set the NTP (Network Time Protocol) Server. Daylight Saving can also be configured to automatically adjust the time when needed.
Save Settings
Don't Save Settings
TIME CONFIGURATION
Current Router Time : Saturday, January 31, 2004 10:48:04 AM
Time Zone : (GMT-08:00) Pacific Time (US/Canada), Tijuana
Enable Daylight Saving :
Daylight Saving Offset : +1:00
Daylight Saving Dates : Month Week Day of Week Time
DST Start Apr 1st Sun 2 am
DST End Oct 5th Sun 2 am
AUTOMATIC TIME CONFIGURATION
Enable NTP Server :
NTP Server Used : << Select NTP Server
SET THE DATE AND TIME MANUALLY
Date And Time : Year 2004 Month Jan Day 31
Hour 10 Minute 48 Second 01 AM
Copy Your Computer's Time Settings
Helpful Hints...
Good timekeeping is important for accurate logs and scheduled firewall rules.
More...
WIRELESS

SysLog

The Broadband Router keeps a running log of events and activities occurring on the Router. You may send these logs to a SysLog server on your network.

Enable Logging to SysLog Server: Check this box to send the router logs to a SysLog Server.

SysLog Server IP Address: The address of the SysLog server that will be used to send the logs. You may also select your computer from the drop-down menu (only if receiving an IP address from the router via DHCP).



Email Settings

The Email feature can be used to send the system log files, router alert messages, and firmware update notification to your email address.

Enable Email Notification: When this option is enabled, router activity logs are e-mailed to a designated email address.

From Email Address: This email address will appear as the sender when you receive a log file or firmware upgrade notification via email.

To Email Address: Enter the email address where you want the email sent.

SMTP Server Address: Enter the SMTP server address for sending email. If your SMTP server requires authentication, select this option.

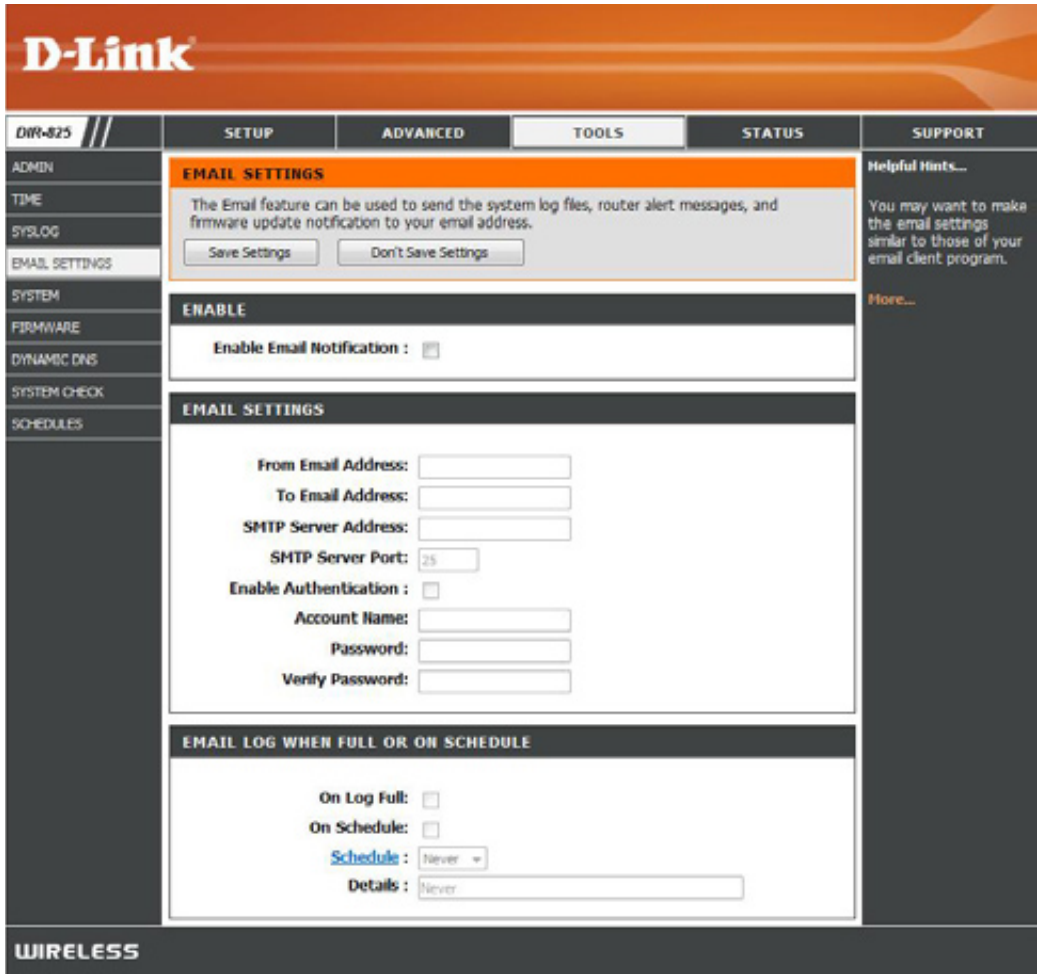
Enable Authentication: Check this box if your SMTP server requires authentication.

Account Name: Enter your account for sending email.

Password: Enter the password associated with the account. Re-type the password associated with the account.

On Log Full: When this option is selected, logs will be sent via email when the log is full.

On Schedule: Selecting this option will send the logs via email according to schedule.



Schedule: This option is enabled when On Schedule is selected. You can select a schedule from the list of defined schedules. To create a schedule, go to **Tools > Schedules**.

System Settings

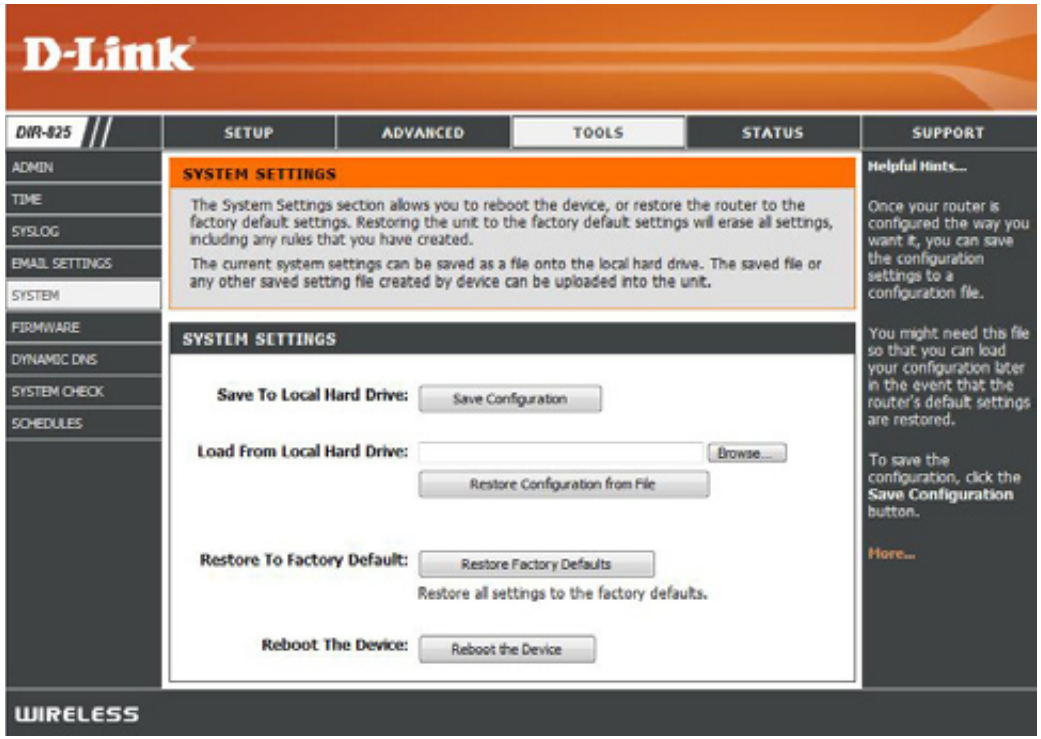
This section allows you to manage the router's configuration settings, reboot the router, and restore the router to the factory default settings. Restoring the unit to the factory default settings will erase all settings, including any rules that you've created.

Save Settings to Local Hard Drive: Use this option to save the current router configuration settings to a file on the hard disk of the computer you are using. First, click the **Save** button. You will then see a file dialog, where you can select a location and file name for the settings.

Load Settings from Local Hard Drive: Use this option to load previously saved router configuration settings. First, use the Browse control to find a previously save file of configuration settings. Then, click the **Load** button to transfer those settings to the router.

Restore to Factory Default Settings: This option will restore all configuration settings back to the settings that were in effect at the time the router was shipped from the factory. Any settings that have not been saved will be lost, including any rules that you have created. If you want to save the current router configuration settings, use the **Save** button above.

Reboot Device: Click to reboot the router.


D-Link
DIR-825
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
ADMIN
TIME
SYSLOG
EMAIL SETTINGS
SYSTEM
FIRMWARE
DYNAMIC DNS
SYSTEM CHECK
SCHEDULES
SYSTEM SETTINGS
The System Settings section allows you to reboot the device, or restore the router to the factory default settings. Restoring the unit to the factory default settings will erase all settings, including any rules that you have created.
The current system settings can be saved as a file onto the local hard drive. The saved file or any other saved setting file created by device can be uploaded into the unit.
SYSTEM SETTINGS
Save To Local Hard Drive:
Save Configuration
Load From Local Hard Drive:
Browse...
Restore Configuration from File
Restore To Factory Default:
Restore Factory Defaults
Restore all settings to the factory defaults.
Reboot The Device:
Reboot the Device
Helpful Hints...
Once your router is configured the way you want it, you can save the configuration settings to a configuration file.
You might need this file so that you can load your configuration later in the event that the router's default settings are restored.
To save the configuration, click the Save Configuration button.
More...
WIRELESS

Update Firmware

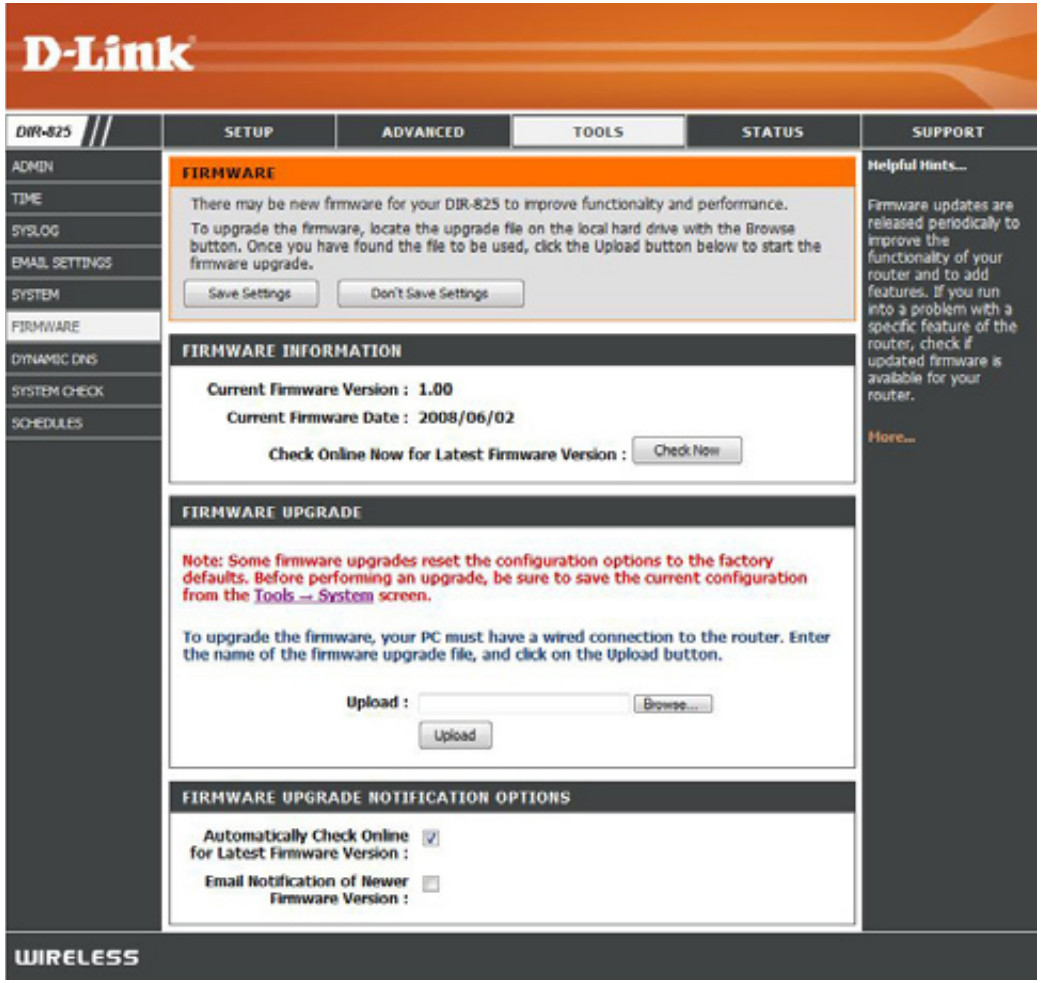
You can upgrade the firmware of the Router here. Make sure the firmware you want to use is on the local hard drive of the computer. Click on **Browse** to locate the firmware file to be used for the update. Please check the D-Link support site for firmware updates at http://support.dlink.com. You can download firmware upgrades to your hard drive from the D-Link support site.

Firmware Upgrade: Click on **Check Now** to find out if there is an updated firmware; if so, download the new firmware to your hard drive.

Browse: After you have downloaded the new firmware, click **Browse** to locate the firmware update on your hard drive. Click **Upload** to complete the firmware upgrade.

Notifications Options: Check **Automatically Check Online for Latest Firmware Version** to have the router check automatically to see if there is a new firmware upgrade.

Check **Email Notification of Newer Firmware Version** to have the router send an email when there is a new firmware available.


D-Link
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SYSTEM
FIRMWARE
DYNAMIC DNS
SYSTEM CHECK
SCHEDULES
FIRMWARE
There may be new firmware for your DIR-825 to improve functionality and performance.
To upgrade the firmware, locate the upgrade file on the local hard drive with the Browse button. Once you have found the file to be used, click the Upload button below to start the firmware upgrade.
Save Settings
Don't Save Settings
FIRMWARE INFORMATION
Current Firmware Version : 1.00
Current Firmware Date : 2008/06/02
Check Online Now for Latest Firmware Version :
Check Now
FIRMWARE UPGRADE
Note: Some firmware upgrades reset the configuration options to the factory defaults. Before performing an upgrade, be sure to save the current configuration from the Tools → System screen.
To upgrade the firmware, your PC must have a wired connection to the router. Enter the name of the firmware upgrade file, and click on the Upload button.
Upload :
Browse...
Upload
FIRMWARE UPGRADE NOTIFICATION OPTIONS
Automatically Check Online for Latest Firmware Version :
Email Notification of Newer Firmware Version :
Helpful Hints...
Firmware updates are released periodically to improve the functionality of your router and to add features. If you run into a problem with a specific feature of the router, check if updated firmware is available for your router.
More...
WIRELESS

DDNS

The DDNS feature allows you to host a server (Web, FTP, Game Server, etc…) using a domain name that you have purchased (www.whateveryournameis.com) with your dynamically assigned IP address. Most broadband Internet Service Providers assign dynamic (changing) IP addresses. Using a DDNS service provider, your friends can enter in your domain name to connect to your server no matter what your IP address is.

Enable Dynamic DNS: Dynamic Domain Name System is a method of keeping a domain name linked to a changing IP Address. Check the box to enable DDNS.

Server Address: Choose your DDNS provider from the drop down menu.

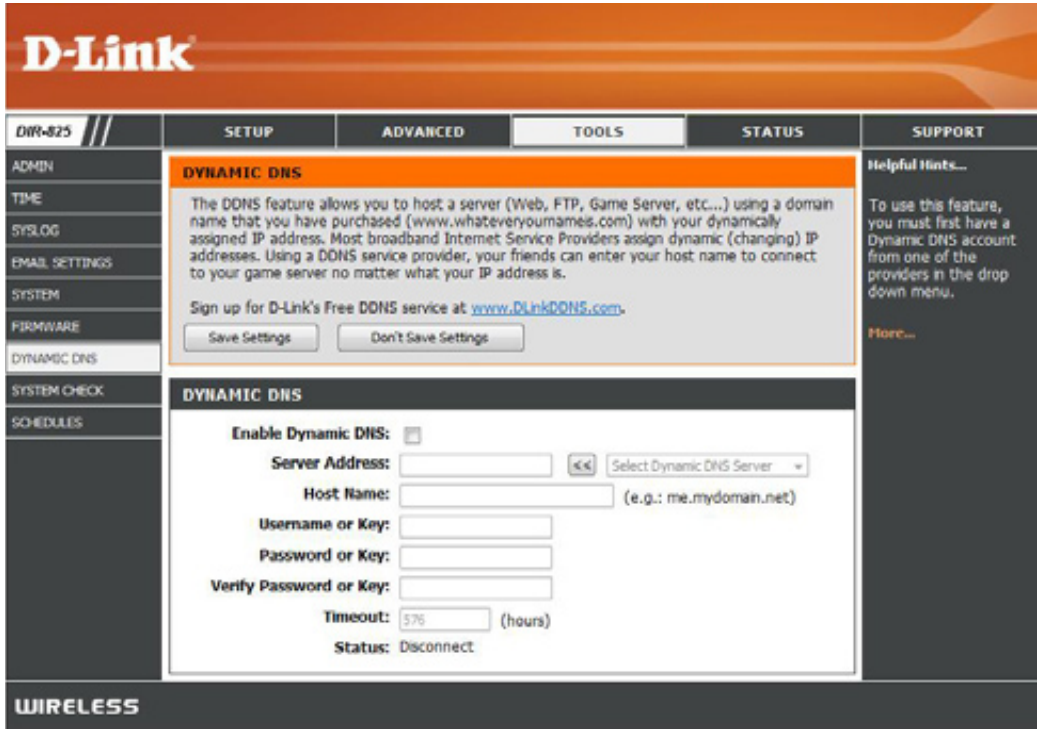
Host Name: Enter the Host Name that you registered with your DDNS service provider.

Username or Key: Enter the Username for your DDNS account.

Password or Key: Enter the Password for your DDNS account.

Timeout: Enter a time (in hours).

Status: Displays the current connection status.


D-Link
DIR-825
SETUP
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TOOLS
STATUS
SUPPORT
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SYSLOG
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DYNAMIC DNS
SYSTEM CHECK
SCHEDULES
DYNAMIC DNS
The DDNS feature allows you to host a server (Web, FTP, Game Server, etc...) using a domain name that you have purchased (www.whateveryournameis.com) with your dynamically assigned IP address. Most broadband Internet Service Providers assign dynamic (changing) IP addresses. Using a DDNS service provider, your friends can enter your host name to connect to your game server no matter what your IP address is.
Sign up for D-Link's Free DDNS service at www.DLinkDDNS.com.
Save Settings
Don't Save Settings
DYNAMIC DNS
Enable Dynamic DNS:
Server Address:
Select Dynamic DNS Server
Host Name:
(e.g.: me.mydomain.net)
Username or Key:
Password or Key:
Verify Password or Key:
Timeout:
576
(hours)
Status: Disconnect
Helpful Hints...
To use this feature, you must first have a Dynamic DNS account from one of the providers in the drop down menu.
More...
WIRELESS

System Check

Ping Test: The Ping Test is used to send Ping packets to test if a computer is on the Internet. Enter the IP Address that you wish to Ping, and click **Ping**.

Ping Results: The results of your ping attempts will be displayed here.

Schedules

Schedules can be created for use with enforcing rules. For example, if you want to restrict web access to Mon-Fri from 3pm to 8pm, you could create a schedule selecting Mon, Tue, Wed, Thu, and Fri and enter a Start Time of 3pm and End Time of 8pm.

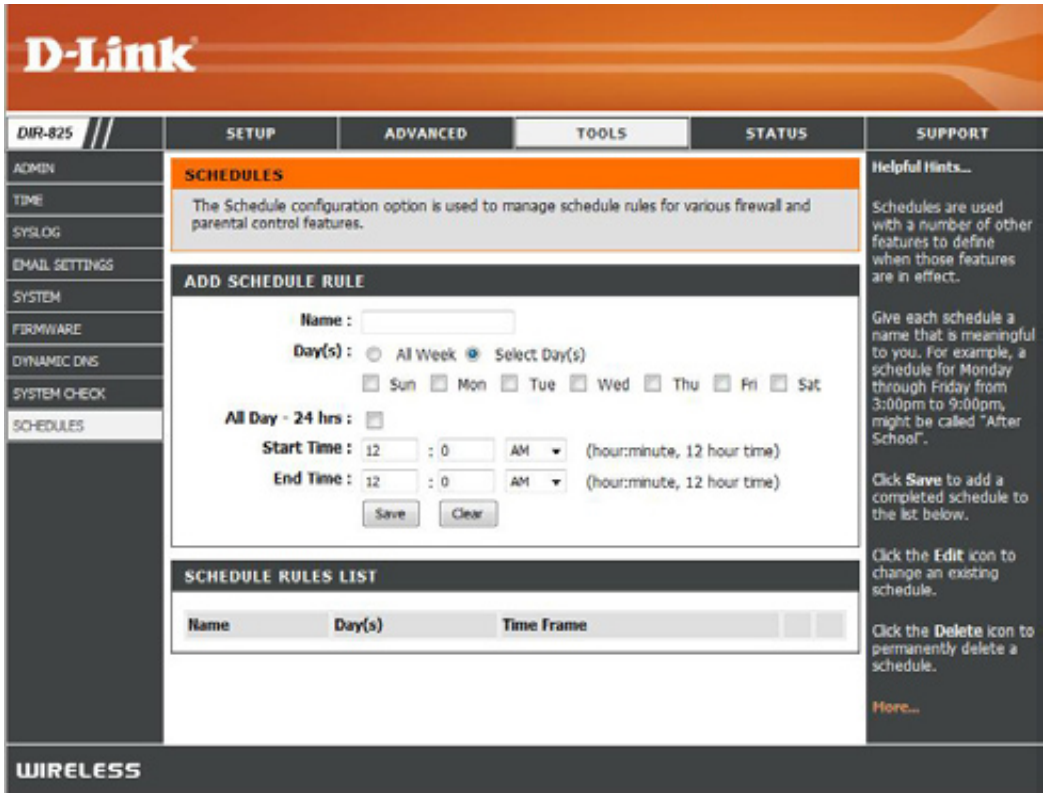
Name: Enter a name for your new schedule.

Days: Select a day, a range of days, or All Week to include every day.

Time: Check **All Day - 24hrs** or enter a start and end time for your schedule.

Save: Click **Save** to save your schedule. You must click **Save Settings** at the top for your schedules to go into effect.

Schedule Rules List: The list of schedules will be listed here. Click the **Edit** icon to make changes or click the **Delete** icon to remove the schedule.


D-Link
DIR-825
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
ADMIN
TIME
SYSLOG
EMAIL SETTINGS
SYSTEM
FIRMWARE
DYNAMIC DNS
SYSTEM CHECK
SCHEDULES
SCHEDULES
The Schedule configuration option is used to manage schedule rules for various firewall and parental control features.
ADD SCHEDULE RULE
Name :
Day(s) : All Week Select Day(s)
Sun Mon Tue Wed Thu Fri Sat
All Day - 24 hrs :
Start Time : 12 : 0 AM (hour:minute, 12 hour time)
End Time : 12 : 0 AM (hour:minute, 12 hour time)
Save
Clear
SCHEDULE RULES LIST
Name
Day(s)
Time Frame
Helpful Hints...
Schedules are used with a number of other features to define when those features are in effect.
Give each schedule a name that is meaningful to you. For example, a schedule for Monday through Friday from 3:00pm to 9:00pm, might be called "After School".
Click Save to add a completed schedule to the list below.
Click the Edit icon to change an existing schedule.
Click the Delete icon to permanently delete a schedule.
More...
WIRELESS

Device Information

This page displays the current information for the DIR-825. It will display the LAN, WAN (Internet), and Wireless information. If your Internet connection is set up for a Dynamic IP address then a **Release** button and a **Renew** button will be displayed. Use **Release** to disconnect from your ISP and use **Renew** to connect to your ISP.

If your Internet connection is set up for PPPoE, a **Connect** button and a **Disconnect** button will be displayed. Use **Disconnect** to drop the PPPoE connection and use **Connect** to establish the PPPoE connection.

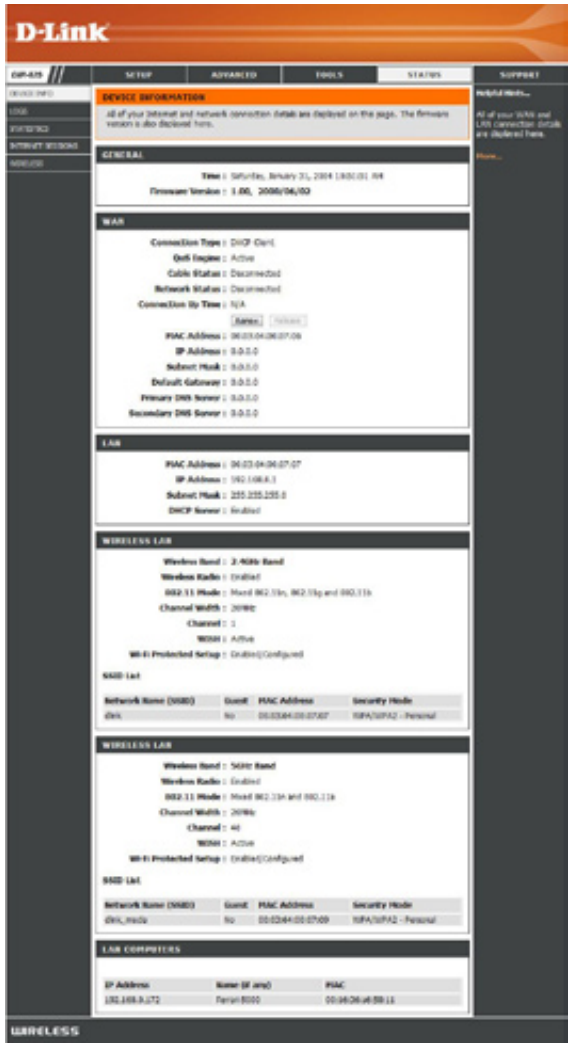
General: Displays the router's time and firmware version.

WAN: Displays the MAC address and the public IP settings for the router.

LAN: Displays the MAC address and the private (local) IP settings for the router.

Wireless LAN: Displays the wireless MAC address and your wireless settings such as SSID and Channel.

LAN Computers: Displays computers and devices that are connected to the router via Ethernet and that are receiving an IP address assigned by the router (DHCP).



Log

The router automatically logs (records) events of possible interest in it's internal memory. If there isn't enough internal memory for all events, logs of older events are deleted but logs of the latest events are retained. The Logs option allows you to view the router logs. You can define what types of events you want to view and the level of the events to view. This router also has external Syslog Server support so you can send the log files to a computer on your network that is running a Syslog utility.

What to View: You can select the types of messages that you want to display from the log. **Firewall & Security**, **System**, and **Router Status** messages can be selected.

View Levels: There are three levels of message importance: **Informational**, **Warning**, and **Critical**. Select the levels that you want displayed in the log.

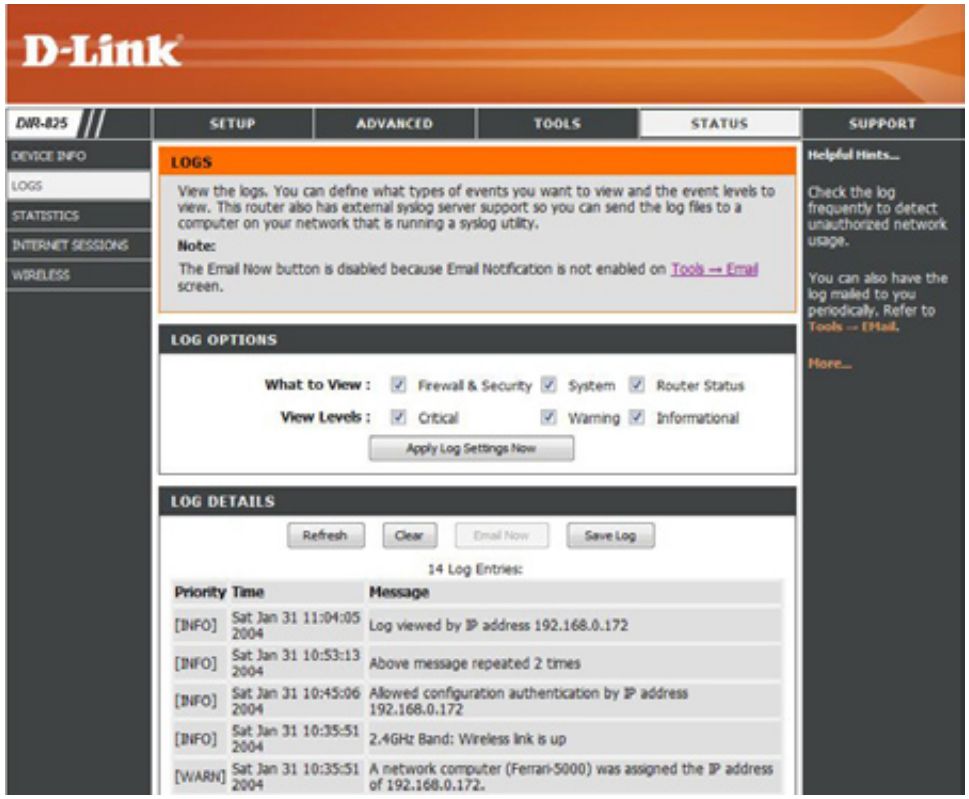
Apply Log Settings: Will filter the log results so that only the selected options appear.

Refresh: Updates the log details on the screen so it displays any recent activity.

Clear: Clears all of the log contents.

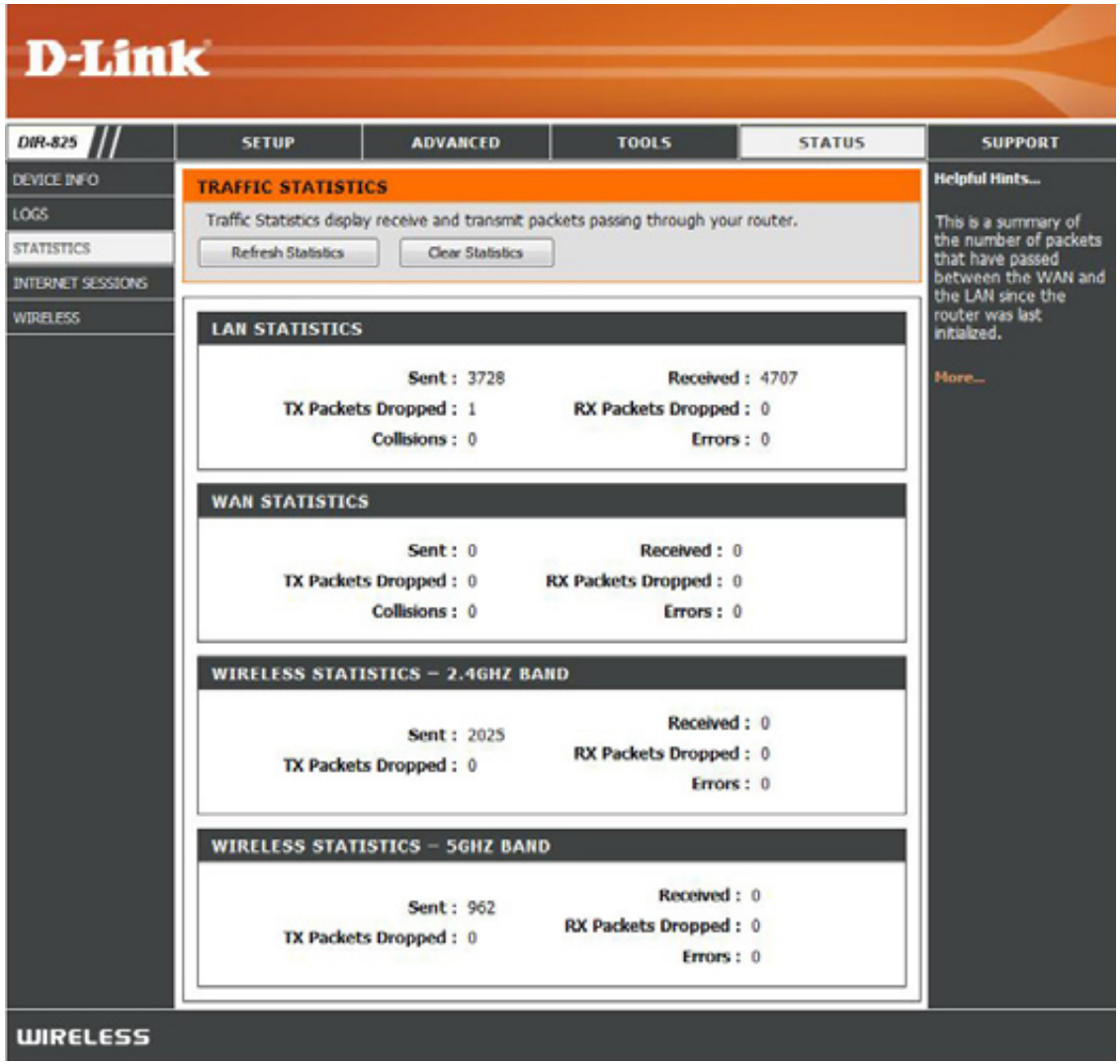
Email Now: This option will send a copy of the router log to the email address configured in the **Tools** > **Email Settings** screen.

Save Log: This option will save the router to a log file on your computer.


D-Link
DIR-825
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
DEVICE INFO
LOGS
STATISTICS
INTERNET SESSIONS
WIRELESS
LOGS
View the logs. You can define what types of events you want to view and the event levels to view. This router also has external syslog server support so you can send the log files to a computer on your network that is running a syslog utility.
Note:
The Email Now button is disabled because Email Notification is not enabled on Tools → Email screen.
LOG OPTIONS
What to View : Firewall & Security System Router Status
View Levels : Critical Warning Informational
Apply Log Settings Now
LOG DETAILS
Refresh
Clear
Email Now
Save Log
14 Log Entries:
Priority Time Message
[INFO] Sat Jan 31 11:04:05 2004 Log viewed by IP address 192.168.0.172
[INFO] Sat Jan 31 10:53:13 2004 Above message repeated 2 times
[INFO] Sat Jan 31 10:45:06 2004 Allowed configuration authentication by IP address 192.168.0.172
[INFO] Sat Jan 31 10:35:51 2004 2.4GHz Band: Wireless link is up
[WARN] Sat Jan 31 10:35:51 2004 A network computer (Ferrari-5000) was assigned the IP address of 192.168.0.172.
Helpful Hints...
Check the log frequently to detect unauthorized network usage.
You can also have the log mailed to you periodically. Refer to Tools → EMail.
More...

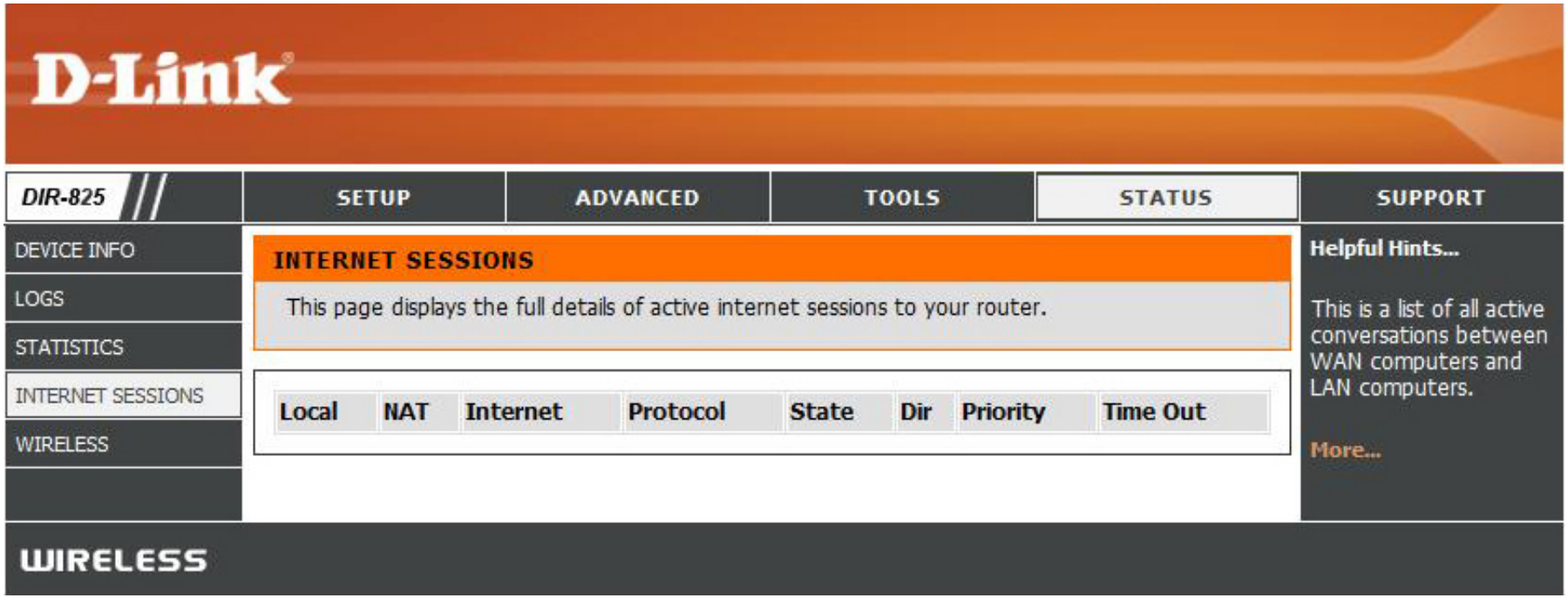
Statistics

The screen below displays the Traffic Statistics. Here you can view the amount of packets that pass through the DIR-825 on both the Internet, LAN ports and both the 802.11n/g (2.4GHz) and 802.11n/a (5GHz) wireless bands. The traffic counter will reset if the device is rebooted.



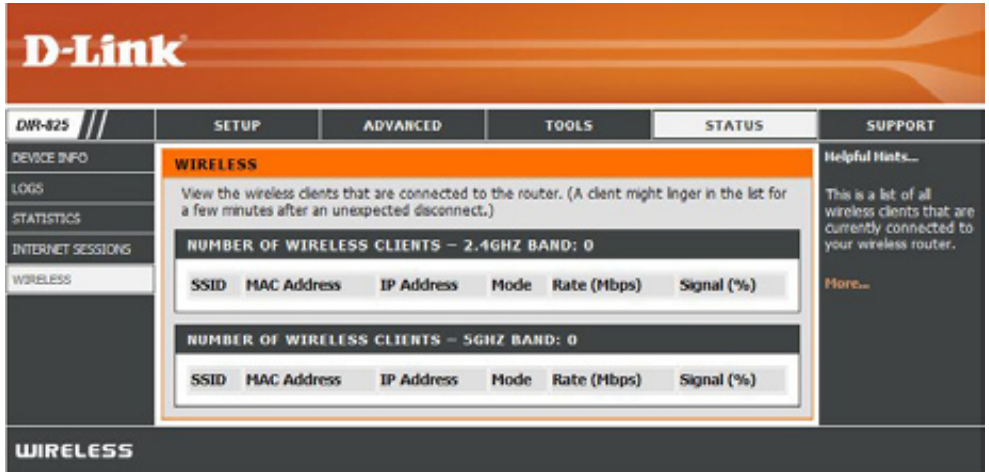
Internet Sessions

The Internet Sessions page displays full details of active Internet sessions through your router. An Internet session is a conversation between a program or application on a LAN-side computer and a program or application on a WAN-side computer.

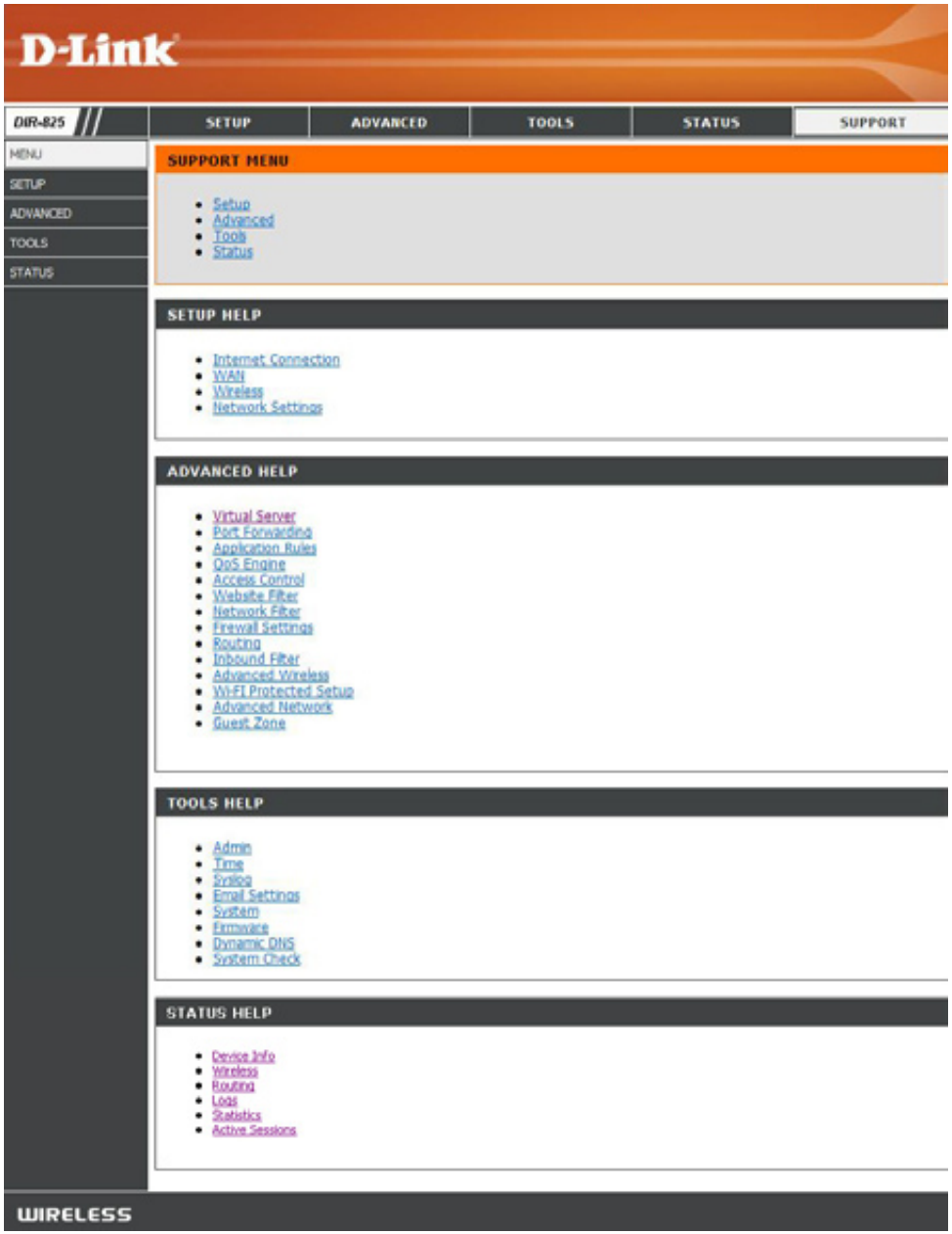


Wireless

The wireless client table displays a list of current connected wireless clients. This table also displays the connection time and MAC address of the connected wireless clients.



Support


D-Link
DIR-825
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
MENU
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT MENU
Setup
Advanced
Tools
Status
SETUP HELP
Internet Connection
WAN
Wireless
Network Settings
ADVANCED HELP
Virtual Server
Port Forwarding
Application Rules
QoS Engine
Access Control
Website Filter
Network Filter
Firewall Settings
Routing
Inbound Filter
Advanced Wireless
Wi-Fi Protected Setup
Advanced Network
Guest Zone
TOOLS HELP
Admin
Time
Syslog
Email Settings
System
Firmware
Dynamic DNS
System Check
STATUS HELP
Device Info
Wireless
Routing
Logs
Statistics
Active Sessions
WIRELESS

Wireless Security

This section will show you the different levels of security you can use to protect your data from intruders. The DIR-825 offers the following types of security:

- WPA2 (Wi-Fi Protected Access 2)
- WPA (Wi-Fi Protected Access)
- WPA2-PSK (Pre-Shared Key)
- WPA-PSK (Pre-Shared Key)

What is WPA?

WPA, or Wi-Fi Protected Access, is a Wi-Fi standard that was designed to improve the security features of WEP (Wired Equivalent Privacy).

The 2 major improvements over WEP:

- Improved data encryption through the Temporal Key Integrity Protocol (TKIP). TKIP scrambles the keys using a hashing algorithm and, by adding an integrity-checking feature, ensures that the keys haven't been tampered with. WPA2 is based on 802.11i and uses Advanced Encryption Standard (AES) instead of TKIP.

- User authentication, which is generally missing in WEP, through the extensible authentication protocol (EAP). WEP regulates access to a wireless network based on a computer's hardware-specific MAC address, which is relatively simple to be sniffed out and stolen. EAP is built on a more secure public-key encryption system to ensure that only authorized network users can access the network.

WPA-PSK/WPA2-PSK uses a passphrase or key to authenticate your wireless connection. The key is an alpha-numeric password between 8 and 63 characters long. The password can include symbols (!?*&_) and spaces. This key must be the exact same key entered on your wireless router or access point.

WPA/WPA2 incorporates user authentication through the Extensible Authentication Protocol (EAP). EAP is built on a more secure public key encryption system to ensure that only authorized network users can access the network.

Wireless Security Setup Wizard

To run the security wizard, click on Setup at the top and then click **Launch Wireless Security Setup Wizard**.

Check the **Manually set 5GHz band Network Name...** box to manually set your desired wireless network name for the 5GHz band.

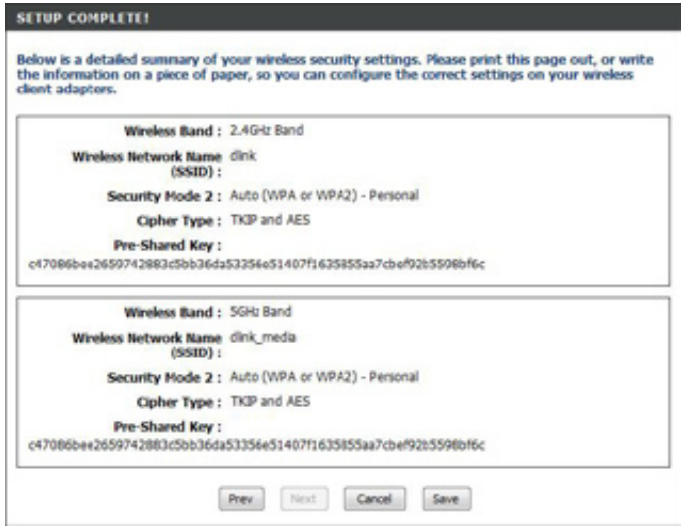
Type your desired wireless network name (SSID).

Automatically: Select this option to automatically generate the router's network key and click **Next**.

Manually: Select this option to manually enter your network key and click **Next**.

STEP 1: WELCOME TO THE D-LINK WIRELESS SECURITY SETUP WIZARD
Give your network a name, using up to 32 characters.
Network Name (SSID) 2.4GHz Band :
dlink
Manually set 5GHz band Network Name (SSID)
Automatically assign a network key for both 2.4GHz and 5GHz band (Recommended)
To prevent outsiders from accessing your network, the router will automatically assign a security to your network.
Manually assign a network key
Use this options if you prefer to create our own key.
Note: All D-Link wireless adapters currently support WPA.
Prev
Next
Cancel
Save

If you selected **Automatically**, the summary window will display your settings. Write down the security key and enter this on your wireless clients. Click **Save** to save your settings.


SETUP COMPLETE!
Below is a detailed summary of your wireless security settings. Please print this page out, or write the information on a piece of paper, so you can configure the correct settings on your wireless client adapters.
Wireless Band : 2.4GHz Band
Wireless Network Name (SSID) : dlink
Security Mode 2 : Auto (WPA or WPA2) - Personal
Cipher Type : TKIP and AES
Pre-Shared Key :
c47086bee2659742883c5bb36da53356e51407f1635855aa7cbef92b5596bf6c
Wireless Band : 5GHz Band
Wireless Network Name (SSID) : dlink_media
Security Mode 2 : Auto (WPA or WPA2) - Personal
Cipher Type : TKIP and AES
Pre-Shared Key :
c47086bee2659742883c5bb36da53356e51407f1635855aa7cbef92b5596bf6c
Prev
Next
Cancel
Save

If you selected **Manually**, the following screen will appear.

STEP 2: SET YOUR WIRELESS SECURITY PASSWORD
You have selected your security level - you will need to set a wireless security password.
The WPA (Wi-Fi Protected Access) key must meet one of following guildelines:
- Between 8 and 64 characters (A longer WPA key is more secure than a short one)
- Exactly 64 characters using 0-9 and A-F
Use the same Wireless Security Password on both 2.4GHz and 5GHz band
2.4GHz Band Wireless Security Password : 11111111
Note: You will need to enter the same password as keys in this step into your wireless clients in order to enable proper wireless communication.
Prev
Next
Cancel
Save

Add Wireless Device with WPS Wizard

From the **Setup** > **Wireless Settings** screen, click **Add Wireless Device with WPS**.

ADD WIRELESS DEVICE WITH WPS (WI-FI PROTECTED SETUP) WIZARD
This wizard is designed to assist you in connecting your wireless device to your router. It will guide you through step-by-step instructions on how to get your wireless device connected. Click the button below to begin.
Add Wireless Device with WPS

Select **Auto** to add a wireless client using WPS (Wi-Fi Protected Setup). Once you select **Auto** and click **Connect**, you will have a 120 second time limit to apply the settings to your wireless client(s) and successfully establish a connection.

If you select **Manual**, a settings summary screen will appear. Write down the security key and enter this on your wireless clients.

STEP 1: SELECT CONFIGURATION METHOD FOR YOUR WIRELESS NETWORK
Please select one of following configuration methods and click next to continue.
Auto Select this option if your wireless device supports WPS (Wi-Fi Protected Setup)
Manual Select this option will display the current wireless settings for you to configure the wireless device manually
Prev
Next
Cancel
Connect

PIN: Select this option to use PIN method. In order to use this method you must know the wireless client's 8 digit PIN and click **Connect**.

PBC: Select this option to use PBC (Push Button) method to add a wireless client. Click **Connect**.

STEP 2: CONNECT YOUR WIRELESS DEVICE
There are two ways to add wireless device to your wireless network:
-PIN (Personal Identification Number)
-PBC (Push Button Configuration)
PIN:
please enter the PIN from your wireless device and click the below 'Connect' Button
PBC
please press the push button on your wireless device and click the below 'Connect' Button within 120 seconds
Prev
Next
Cancel
Connect

Configure WPA-Personal (PSK)

It is recommended to enable encryption on your wireless router before your wireless network adapters. Please establish wireless connectivity before enabling encryption. Your wireless signal may degrade when enabling encryption due to the added overhead.

1. Log into the web-based configuration by opening a web browser and entering the IP address of the router (192.168.0.1). Click on **Setup** and then click **Wireless Settings** on the left side.

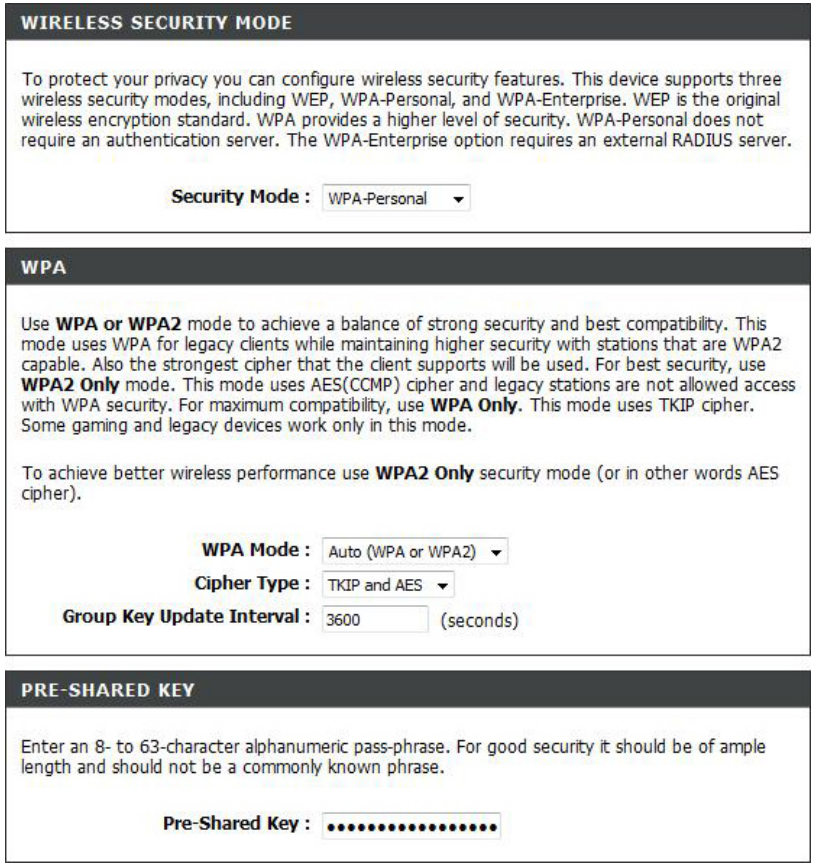
2. Next to *Security Mode*, select **WPA-Personal**.

3. Next to *WPA Mode*, select **Auto**, **WPA2 Only**, or **WPA Only**. Use **Auto** if you have wireless clients using both WPA and WPA2.

4. Next to *Cypher Type*, select **TKIP and AES**, **TKIP**, or **AES**.

5. Next to *Group Key Update Interval*, enter the amount of time before the group key used for broadcast and multicast data is changed (3600 is default).

6. Next to *Pre-Shared Key*, enter a key (passphrase). The key is entered as a pass-phrase in ASCII format at both ends of the wireless connection. The pass-phrase must be between 8-63 characters.


WIRELESS SECURITY MODE
To protect your privacy you can configure wireless security features. This device supports three wireless security modes, including WEP, WPA-Personal, and WPA-Enterprise. WEP is the original wireless encryption standard. WPA provides a higher level of security. WPA-Personal does not require an authentication server. The WPA-Enterprise option requires an external RADIUS server.
Security Mode : WPA-Personal
WPA
Use WPA or WPA2 mode to achieve a balance of strong security and best compatibility. This mode uses WPA for legacy clients while maintaining higher security with stations that are WPA2 capable. Also the strongest cipher that the client supports will be used. For best security, use WPA2 Only mode. This mode uses AES(CCMP) cipher and legacy stations are not allowed access with WPA security. For maximum compatibility, use WPA Only. This mode uses TKIP cipher. Some gaming and legacy devices work only in this mode.
To achieve better wireless performance use WPA2 Only security mode (or in other words AES cipher).
WPA Mode : Auto (WPA or WPA2)
Cipher Type : TKIP and AES
Group Key Update Interval : 3600 (seconds)
PRE-SHARED KEY
Enter an 8- to 63-character alphanumeric pass-phrase. For good security it should be of ample length and should not be a commonly known phrase.
Pre-Shared Key : ••••••••••••••••

7. Click **Save Settings** to save your settings. If you are configuring the router with a wireless adapter, you will lose connectivity until you enable WPA-PSK on your adapter and enter the same passphrase as you did on the router.

Configure WPA-Enterprise (RADIUS)

It is recommended to enable encryption on your wireless router before your wireless network adapters. Please establish wireless connectivity before enabling encryption. Your wireless signal may degrade when enabling encryption due to the added overhead.

1. Log into the web-based configuration by opening a web browser and entering the IP address of the router (192.168.0.1). Click on **Setup** and then click **Wireless Settings** on the left side.

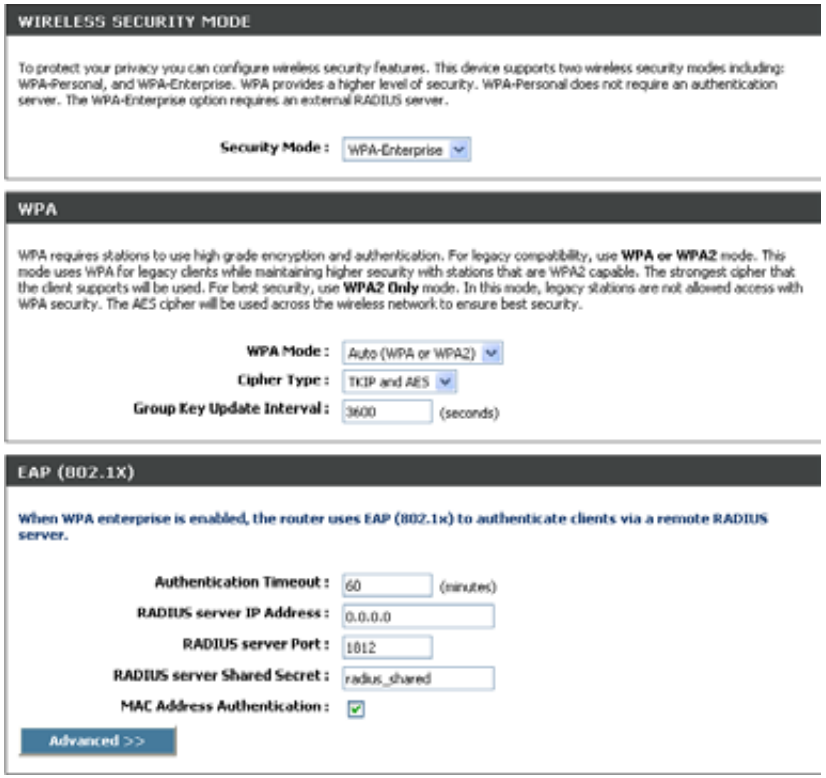
2. Next to *Security Mode*, select **WPA-Enterprise**.

3. Next to *WPA Mode*, select **Auto**, **WPA2 Only**, or **WPA Only**. Use **Auto** if you have wireless clients using both WPA and WPA2.

4. Next to *Cypher Type*, select **TKIP and AES**, **TKIP**, or **AES**.

5. Next to *Group Key Update Interval*, enter the amount of time before the group key used for broadcast and multicast data is changed (3600 is default).

6. Next to *Authentication Timeout*, enter the amount of time before a client is required to re-authenticate (60 minutes is default).


WIRELESS SECURITY MODE
To protect your privacy you can configure wireless security features. This device supports two wireless security modes including: WPA-Personal, and WPA-Enterprise. WPA provides a higher level of security. WPA-Personal does not require an authentication server. The WPA-Enterprise option requires an external RADIUS server.
Security Mode : WPA-Enterprise
WPA
WPA requires stations to use high grade encryption and authentication. For legacy compatibility, use WPA or WPA2 mode. This mode uses WPA for legacy clients while maintaining higher security with stations that are WPA2 capable. The strongest cipher that the client supports will be used. For best security, use WPA2 Only mode. In this mode, legacy stations are not allowed access with WPA security. The AES cipher will be used across the wireless network to ensure best security.
WPA Mode : Auto (WPA or WPA2)
Cipher Type : TKIP and AES
Group Key Update Interval : 3600 (seconds)
EAP (802.1X)
When WPA enterprise is enabled, the router uses EAP (802.1x) to authenticate clients via a remote RADIUS server.
Authentication Timeout : 60 (minutes)
RADIUS server IP Address : 0.0.0.0
RADIUS server Port : 1812
RADIUS server Shared Secret : radius_shared
MAC Address Authentication :
Advanced >>

7. Next to *RADIUS Server IP Address* enter the IP Address of your RADIUS server.

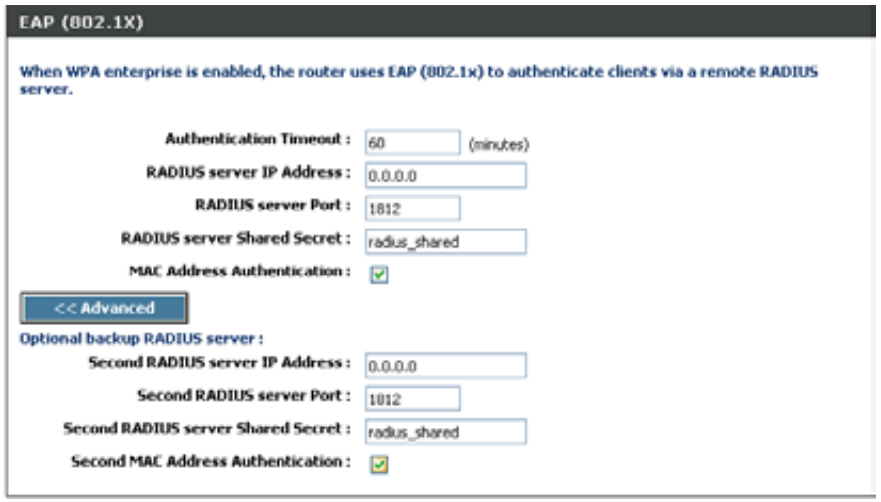
8. Next to *RADIUS Server Port*, enter the port you are using with your RADIUS server. 1812 is the default port.

9. Next to *RADIUS Server Shared Secret*, enter the security key.

10. If the *MAC Address Authentication* box is selected then the user will need to connect from the same computer whenever logging into the wireless network.

11. Click **Advanced** to enter settings for a secondary RADIUS Server.

12. Click **Apply Settings** to save your settings.


EAP (802.1X)
When WPA enterprise is enabled, the router uses EAP (802.1x) to authenticate clients via a remote RADIUS server.
Authentication Timeout : 60 (minutes)
RADIUS server IP Address : 0.0.0.0
RADIUS server Port : 1812
RADIUS server Shared Secret : radius_shared
MAC Address Authentication :
<< Advanced
Optional backup RADIUS server :
Second RADIUS server IP Address : 0.0.0.0
Second RADIUS server Port : 1812
Second RADIUS server Shared Secret : radius_shared
Second MAC Address Authentication :

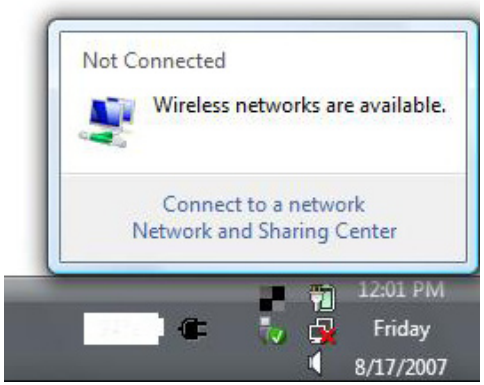
Connect to a Wireless Network
Using Windows Vista®

Windows Vista® users may use the built-in wireless utility. If you are using another company's utility or Windows® 2000, please refer to the user manual of your wireless adapter for help with connecting to a wireless network. Most utilities will have a "site survey" option similar to the Windows Vista® utility as seen below.

If you receive the **Wireless Networks Detected** bubble, click on the center of the bubble to access the utility.

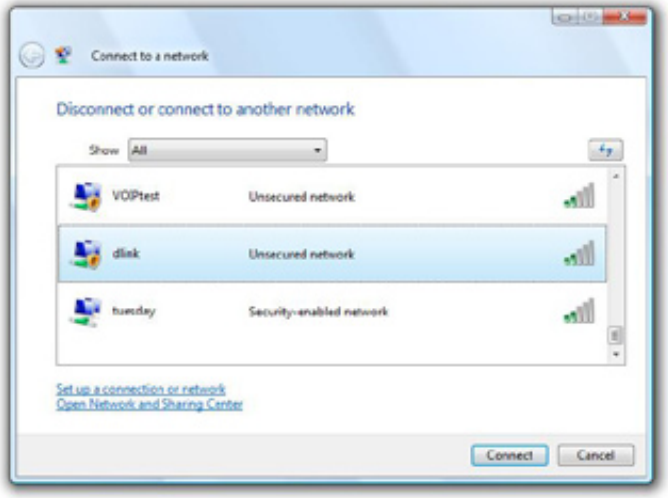
or

Right-click on the wireless computer icon in your system tray (lower-right corner next to the time). Select **Connect to a network**.



The utility will display any available wireless networks in your area. Click on a network (displayed using the SSID) and click the **Connect** button.

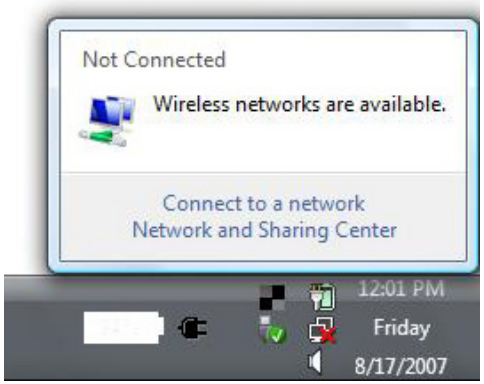
If you get a good signal but cannot access the Internet, check you TCP/IP settings for your wireless adapter. Refer to the **Networking Basics** section in this manual for more information.



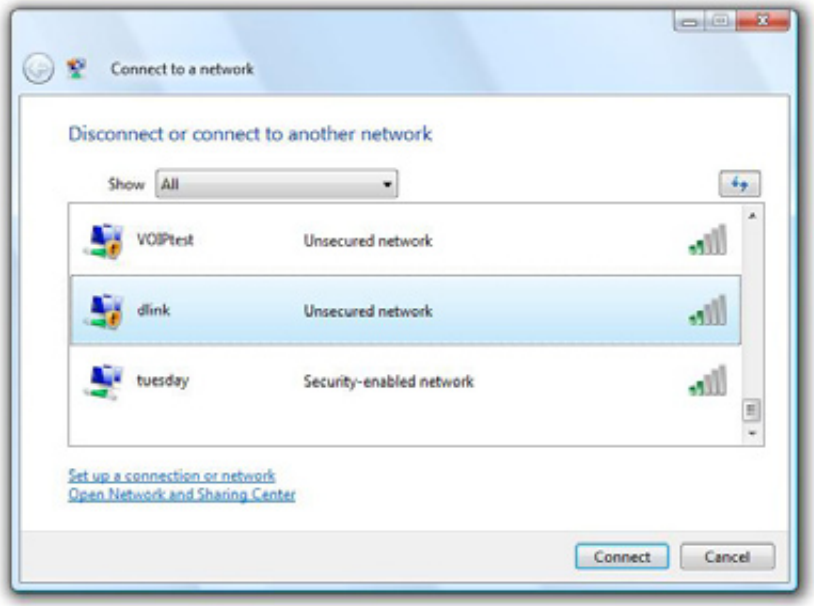
Configure Wireless Security

It is recommended to enable wireless security (WPA/WPA2) on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the security key or passphrase being used.

1. Open the Windows Vista® Wireless Utility by right-clicking on the wireless computer icon in your system tray (lower right corner of screen). Select **Connect to a network**.

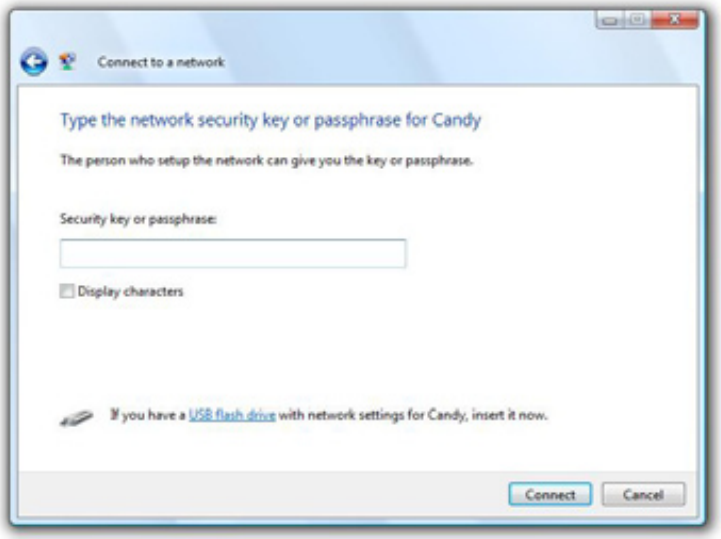


2. Highlight the wireless network (SSID) you would like to connect to and click **Connect**.



3. Enter the same security key or passphrase that is on your router and click **Connect**.

It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the security settings are correct. The key or passphrase must be exactly the same as on the wireless router.


Connect to a network
Type the network security key or passphrase for Candy
The person who setup the network can give you the key or passphrase.
Security key or passphrase:
Display characters
If you have a USB flash drive with network settings for Candy, insert it now.
Connect
Cancel

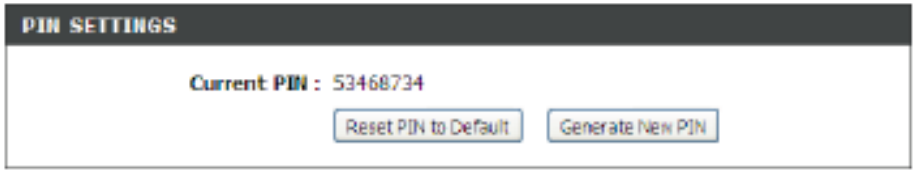
Connect Using WCN 2.0 in Windows Vista®

The router supports Wi-Fi protection, referred to as WCN 2.0 in Windows Vista®. The following instructions for setting this up depends on whether you are using Windows Vista® to configure the router or third party software.

When you first set up the router, Wi-Fi protection is disabled and unconfigured. To enjoy the benefits of Wi-Fi protection, the router must be both enabled and configured. There are three basic methods to accomplish this: use Windows Vista's built-in support for WCN 2.0, use software provided by a third party, or manually configure.

If you are running Windows Vista®, log into the router and click the **Enable** checkbox in the **Basic** > **Wireless** section. Use the Current PIN that is displayed on the **Advanced** > **Wi-Fi Protected Setup** section or choose to click the **Generate New PIN** button or **Reset PIN to Default** button.

For additional information, please refer to page 83.

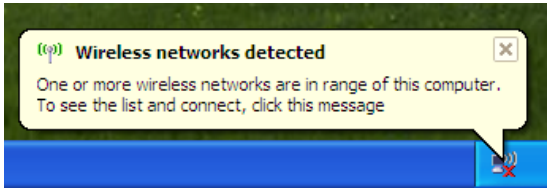


If you are using third party software to set up Wi-Fi Protection, carefully follow the directions. When you are finished, proceed to the next section to set up the newly-configured router.

Connect to a Wireless Network
Using Windows® XP

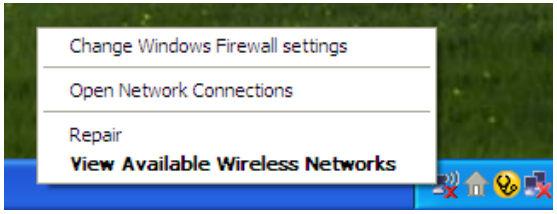
Windows® XP users may use the built-in wireless utility (Zero Configuration Utility). The following instructions are for Service Pack 2 users. If you are using another company's utility or Windows® 2000, please refer to the user manual of your wireless adapter for help with connecting to a wireless network. Most utilities will have a "site survey" option similar to the Windows® XP utility as seen below.

If you receive the **Wireless Networks Detected** bubble, click on the center of the bubble to access the utility.


Wireless networks detected
One or more wireless networks are in range of this computer.
To see the list and connect, click this message

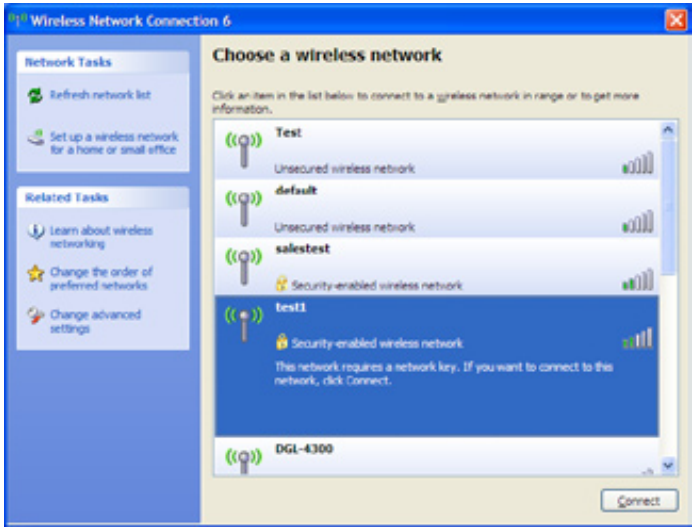
or

Right-click on the wireless computer icon in your system tray (lower-right corner next to the time). Select **View Available Wireless Networks**.



The utility will display any available wireless networks in your area. Click on a network (displayed using the SSID) and click the **Connect** button.

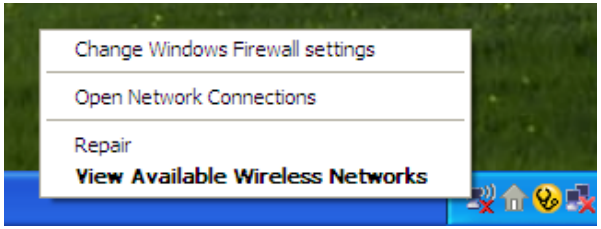
If you get a good signal but cannot access the Internet, check you TCP/IP settings for your wireless adapter. Refer to the **Networking Basics** section in this manual for more information.



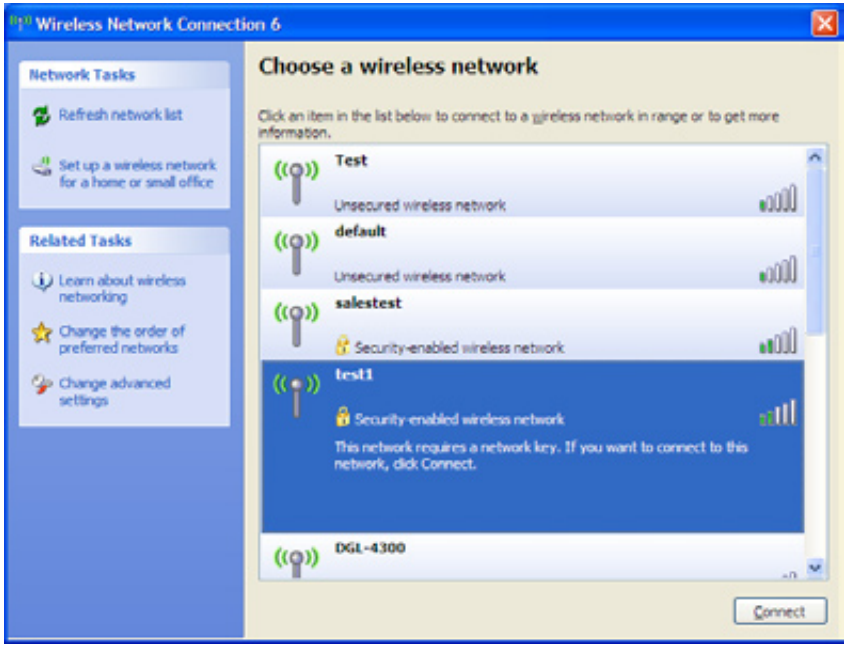
Configure WPA-PSK

It is recommended to enable WPA on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the WPA key being used.

1. Open the Windows® XP Wireless Utility by right-clicking on the wireless computer icon in your system tray (lower-right corner of screen). Select **View Available Wireless Networks**.

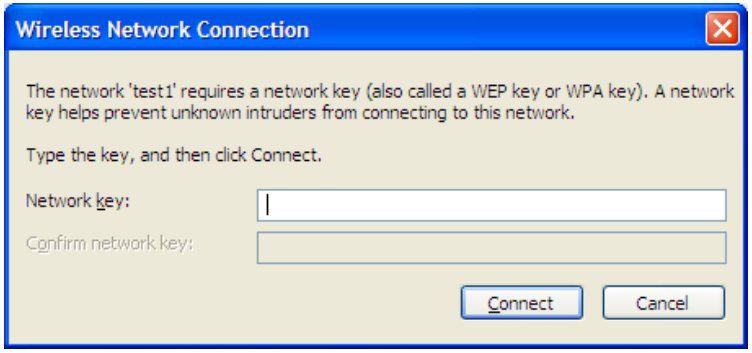


2. Highlight the wireless network (SSID) you would like to connect to and click **Connect**.


Wireless Network Connection 6
Network Tasks
Refresh network list
Set up a wireless network for a home or small office
Related Tasks
Learn about wireless networking
Change the order of preferred networks
Change advanced settings
Choose a wireless network
Click an item in the list below to connect to a wireless network in range or to get more information.
Test
Unsecured wireless network
default
Unsecured wireless network
salestest
Security-enabled wireless network
test1
Security-enabled wireless network
This network requires a network key. If you want to connect to this network, click Connect.
DGL-4300
Connect

3. The **Wireless Network Connection** box will appear. Enter the WPA-PSK passphrase and click **Connect**.

It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the WPA-PSK settings are correct. The WPA-PSK passphrase must be exactly the same as on the wireless router.


Wireless Network Connection
The network 'test1' requires a network key (also called a WEP key or WPA key). A network key helps prevent unknown intruders from connecting to this network.
Type the key, and then click Connect.
Network key:
Confirm network key:
Connect
Cancel

Troubleshooting

This chapter provides solutions to problems that can occur during the installation and operation of the DIR-825. Read the following descriptions if you are having problems. (The examples below are illustrated in Windows® XP. If you have a different operating system, the screenshots on your computer will look similar to the following examples.)

1. Why can't I access the web-based configuration utility?

When entering the IP address of the D-Link router (192.168.0.1 for example), you are not connecting to a website on the Internet or have to be connected to the Internet. The device has the utility built-in to a ROM chip in the device itself. Your computer must be on the same IP subnet to connect to the web-based utility.

- Make sure you have an updated Java-enabled web browser. We recommend the following:
    - Internet Explorer 6.0 or higher
    - Netscape 8 or higher
    - Mozilla 1.7.12 (5.0) or higher
    - Opera 8.5 or higher
    - Safari 1.2 or higher (with Java 1.3.1 or higher)
    - Camino 0.8.4 or higher
    - Firefox 1.5 or higher

- Verify physical connectivity by checking for solid link lights on the device. If you do not get a solid link light, try using a different cable or connect to a different port on the device if possible. If the computer is turned off, the link light may not be on.

- Disable any Internet security software running on the computer. Software firewalls such as Zone Alarm, Black Ice, Sygate, Norton Personal Firewall, and Windows® XP firewall may block access to the configuration pages. Check the help files included with your firewall software for more information on disabling or configuring it.

- Configure your Internet settings:

    - Go to **Start** > **Settings** > **Control Panel**. Double-click the **Internet Options** Icon. From the **Security** tab, click the button to restore the settings to their defaults.

    - Click the **Connection** tab and set the dial-up option to Never Dial a Connection. Click the LAN Settings button. Make sure nothing is checked. Click **OK**.

    - Go to the **Advanced** tab and click the button to restore these settings to their defaults. Click **OK** three times.

    - Close your web browser (if open) and open it.

- Access the web management. Open your web browser and enter the IP address of your D-Link router in the address bar. This should open the login page for your the web management.

- If you still cannot access the configuration, unplug the power to the router for 10 seconds and plug back in. Wait about 30 seconds and try accessing the configuration. If you have multiple computers, try connecting using a different computer.

2. What can I do if I forgot my password?

If you forgot your password, you must reset your router. Unfortunately this process will change all your settings back to the factory defaults.

To reset the router, locate the reset button (hole) on the rear panel of the unit. With the router powered on, use a paperclip to hold the button down for 10 seconds. Release the button and the router will go through its reboot process. Wait about 30 seconds to access the router. The default IP address is 192.168.0.1. When logging in, the username is **admin** and leave the password box empty.

3. Why can't I connect to certain sites or send and receive emails when connecting through my router?

If you are having a problem sending or receiving email, or connecting to secure sites such as eBay, banking sites, and Hotmail, we suggest lowering the MTU in increments of ten (Ex. 1492, 1482, 1472, etc).

Note: AOL DSL+ users must use MTU of 1400.

To find the proper MTU Size, you'll have to do a special ping of the destination you're trying to go to. A destination could be another computer, or a URL.

- Click on **Start** and then click **Run**.
- Windows® 95, 98, and Me users type in **command** (Windows® NT, 2000, and XP users type in **cmd**) and press **Enter** (or click **OK**).
- Once the window opens, you'll need to do a special ping. Use the following syntax:

  ping [url] [-f] [-l] [MTU value]

Example: **ping yahoo.com -f -l 1472**

```
C:\>ping yahoo.com -f -l 1482

Pinging yahoo.com [66.94.234.13] with 1482 bytes of data:

Packet needs to be fragmented but DF set.
Packet needs to be fragmented but DF set.
Packet needs to be fragmented but DF set.
Packet needs to be fragmented but DF set.

Ping statistics for 66.94.234.13:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum =  0ms, Average =  0ms

C:\>ping yahoo.com -f -l 1472

Pinging yahoo.com [66.94.234.13] with 1472 bytes of data:

Reply from 66.94.234.13: bytes=1472 time=93ms TTL=52
Reply from 66.94.234.13: bytes=1472 time=109ms TTL=52
Reply from 66.94.234.13: bytes=1472 time=125ms TTL=52
Reply from 66.94.234.13: bytes=1472 time=203ms TTL=52

Ping statistics for 66.94.234.13:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 93ms, Maximum =  203ms, Average =  132ms

C:\>
```

You should start at 1472 and work your way down by 10 each time. Once you get a reply, go up by 2 until you get a fragmented packet. Take that value and add 28 to the value to account for the various TCP/IP headers. For example, lets say that 1452 was the proper value, the actual MTU size would be 1480, which is the optimum for the network we're working with (1452+28=1480).

Once you find your MTU, you can now configure your router with the proper MTU size.

To change the MTU rate on your router follow the steps below:

- Open your browser, enter the IP address of your router (192.168.0.1) and click **OK**.
- Enter your username (admin) and password (blank by default). Click **OK** to enter the web configuration page for the device.
- Click on **Setup** and then click **Manual Configure**.
- To change the MTU enter the number in the MTU field and click **Save Settings** to save your settings.
- Test your email. If changing the MTU does not resolve the problem, continue changing the MTU in increments of ten.

D-Link wireless products are based on industry standards to provide easy-to-use and compatible high-speed wireless connectivity within your home, business or public access wireless networks. Strictly adhering to the IEEE standard, the D-Link wireless family of products will allow you to securely access the data you want, when and where you want it. You will be able to enjoy the freedom that wireless networking delivers.

A wireless local area network (WLAN) is a cellular computer network that transmits and receives data with radio signals instead of wires. Wireless LANs are used increasingly in both home and office environments, and public areas such as airports, coffee shops and universities. Innovative ways to utilize WLAN technology are helping people to work and communicate more efficiently. Increased mobility and the absence of cabling and other fixed infrastructure have proven to be beneficial for many users.

Wireless users can use the same applications they use on a wired network. Wireless adapter cards used on laptop and desktop systems support the same protocols as Ethernet adapter cards.

Under many circumstances, it may be desirable for mobile network devices to link to a conventional Ethernet LAN in order to use servers, printers or an Internet connection supplied through the wired LAN. A Wireless Router is a device used to provide this link.

What is Wireless?

Wireless or Wi-Fi technology is another way of connecting your computer to the network without using wires. Wi-Fi uses radio frequency to connect wirelessly, so you have the freedom to connect computers anywhere in your home or office network.

Why D-Link Wireless?

D-Link is the worldwide leader and award winning designer, developer, and manufacturer of networking products. D-Link delivers the performance you need at a price you can afford. D-Link has all the products you need to build your network.

How does wireless work?

Wireless works similar to how cordless phone work, through radio signals to transmit data from one point A to point B. But wireless technology has restrictions as to how you can access the network. You must be within the wireless network range area to be able to connect your computer. There are two different types of wireless networks Wireless Local Area Network (WLAN), and Wireless Personal Area Network (WPAN).

Wireless Local Area Network (WLAN)

In a wireless local area network, a device called an Access Point (AP) connects computers to the network. The access point has a small antenna attached to it, which allows it to transmit data back and forth over radio signals. With an indoor access point as seen in the picture, the signal can travel up to 300 feet. With an outdoor access point the signal can reach out up to 30 miles to serve places like manufacturing plants, industrial locations, college and high school campuses, airports, golf courses, and many other outdoor venues.

Wireless Personal Area Network (WPAN)

Bluetooth is the industry standard wireless technology used for WPAN. Bluetooth devices in WPAN operate in a range up to 30 feet away.

Compared to WLAN the speed and wireless operation range are both less than WLAN, but in return it doesn't use nearly as much power which makes it ideal for personal devices, such as mobile phones, PDAs, headphones, laptops, speakers, and other devices that operate on batteries.

Who uses wireless?

Wireless technology as become so popular in recent years that almost everyone is using it, whether it's for home, office, business, D-Link has a wireless solution for it.

Home

- Gives everyone at home broadband access
- Surf the web, check email, instant message, etc.
- Gets rid of the cables around the house
- Simple and easy to use

Small Office and Home Office

- Stay on top of everything at home as you would at office
- Remotely access your office network from home
- Share Internet connection and printer with multiple computers
- No need to dedicate office space

Where is wireless used?

Wireless technology is expanding everywhere not just at home or office. People like the freedom of mobility and it's becoming so popular that more and more public facilities now provide wireless access to attract people. The wireless connection in public places is usually called "hotspots".

Using a D-Link Cardbus Adapter with your laptop, you can access the hotspot to connect to Internet from remote locations like: Airports, Hotels, Coffee Shops, Libraries, Restaurants, and Convention Centers.

Wireless network is easy to setup, but if you're installing it for the first time it could be quite a task not knowing where to start. That's why we've put together a few setup steps and tips to help you through the process of setting up a wireless network.

Tips

Here are a few things to keep in mind, when you install a wireless network.

Centralize your router or Access Point

Make sure you place the router/access point in a centralized location within your network for the best performance. Try to place the router/access point as high as possible in the room, so the signal gets dispersed throughout your home. If you have a two-story home, you may need a repeater to boost the signal to extend the range.

Eliminate Interference

Place home appliances such as cordless telephones, microwaves, and televisions as far away as possible from the router/access point. This would significantly reduce any interference that the appliances might cause since they operate on same frequency.

Security

Don't let you next-door neighbors or intruders connect to your wireless network. Secure your wireless network by turning on the WPA or WEP security feature on the router. Refer to product manual for detail information on how to set it up.

Wireless Modes

There are basically two modes of networking:

- **Infrastructure** – All wireless clients will connect to an access point or wireless router.
- **Ad-Hoc** – Directly connecting to another computer, for peer-to-peer communication, using wireless network adapters on each computer, such as two or more DIR-825 wireless network Cardbus adapters.

An Infrastructure network contains an Access Point or wireless router. All the wireless devices, or clients, will connect to the wireless router or access point.

An Ad-Hoc network contains only clients, such as laptops with wireless cardbus adapters. All the adapters must be in Ad-Hoc mode to communicate.

Networking Basics

Check your IP address

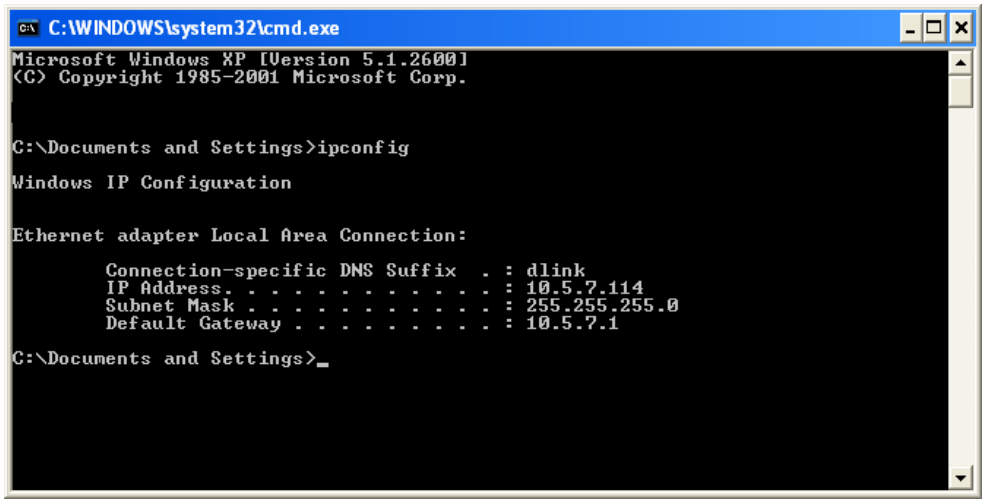
After you install your new D-Link adapter, by default, the TCP/IP settings should be set to obtain an IP address from a DHCP server (i.e. wireless router) automatically. To verify your IP address, please follow the steps below.

Click on **Start** > **Run**. In the run box type ***cmd*** and click **OK.** (Windows Vista® users type *cmd* in the **Start Search** box.)

At the prompt, type ***ipconfig*** and press **Enter**.

This will display the IP address, subnet mask, and the default gateway of your adapter.

If the address is 0.0.0.0, check your adapter installation, security settings, and the settings on your router. Some firewall software programs may block a DHCP request on newly installed adapters.


C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.
C:\Documents and Settings>ipconfig
Windows IP Configuration
Ethernet adapter Local Area Connection:
Connection-specific DNS Suffix . : dlink
IP Address. . . . . : 10.5.7.114
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 10.5.7.1
C:\Documents and Settings>

Statically Assign an IP address

If you are not using a DHCP capable gateway/router, or you need to assign a static IP address, please follow the steps below:

Step 1

Windows Vista® - Click on **Start** > **Control Panel** > **Network and Internet** > **Network and Sharing Center** > **Manage Network Connections.**

Windows® XP - Click on **Start** > **Control Panel** > **Network Connections**.

Windows® 2000 - From the desktop, right-click **My Network Places** > **Properties**.

Step 2

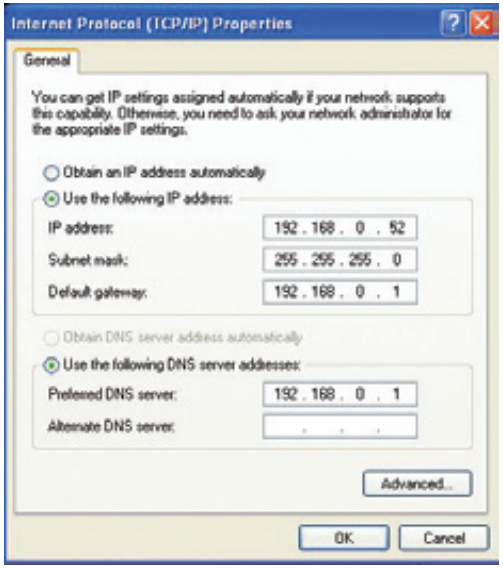
Right-click on the **Local Area Connection** which represents your network adapter and select **Properties**.

Step 3

Highlight **Internet Protocol (TCP/IP)** and click **Properties**.

Step 4

Click **Use the following IP address** and enter an IP address that is on the same subnet as your network or the LAN IP address on your router.


Internet Protocol (TCP/IP) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
192 . 168 . 0 . 52
Subnet mask:
255 . 255 . 255 . 0
Default gateway:
192 . 168 . 0 . 1
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
192 . 168 . 0 . 1
Alternate DNS server:
Advanced...
OK
Cancel

Example: If the router´s LAN IP address is 192.168.0.1, make your IP address 192.168.0.X where X is a number between 2 and 99. Make sure that the number you choose is not in use on the network. Set Default Gateway the same as the LAN IP address of your router (192.168.0.1).

Set Primary DNS the same as the LAN IP address of your router (192.168.0.1). The Secondary DNS is not needed or you may enter a DNS server from your ISP.

Step 5

Click **OK** twice to save your settings.

Technical Specifications

Standards

- IEEE 802.11n (draft 2.0)
- IEEE 802.11g
- IEEE 802.11a
- IEEE 802.3
- IEEE 802.3u
- IEEE 802.3ab

Security

- WPA™ - Personal/Enterprise
- WPA2™ - Personal/Enterprise

Wireless Signal Rates[1]

IEEE 802.11n Draft 2.0 (HT20/40):

- 144.4Mbps (300)
- 130Mbps (270)
- 117Mbps (243)
- 104Mbps (216)
- 78Mbps (162)
- 66Mbps (135)
- 58.5Mbps (121.5)
- 52Mbps (108)
- 39Mbps (81)
- 26Mbps (54)
- 19.5Mbps (40.5)
- 12Mbps (27)
- 6.5Mbps (13.5)

IEEE 802.11a:

- 54Mbps
- 48Mbps
- 36Mbps
- 24Mbps
- 18Mbps
- 12Mbps
- 11Mbps
- 9Mbps
- 6Mbps

IEEE 802.11g:

- 54Mbps
- 48Mbps
- 36Mbps
- 24Mbps
- 18Mbps
- 12Mbps
- 11Mbps
- 9Mbps
- 6Mbps
- 5.5Mbps
- 2Mbps
- 1Mbps

Frequency Range[2] (North America)

- 2.412GHz to 2.462GHz (802.11g/n)
- 5.15GHz to 5.825GHz (802.11a/n)[3]

Transmitter Output Power

- 18dBm ± 2dB

External Antenna Type

- Two (2) detachable reverse SMA Antennas

Operating Temperature

- 32°F to 131°F (0°C to 55°C)

Humidity

- 95% maximum (non-condensing)

Safety & Emissions

- FCC
- IC

Dimensions

- L = 7.6 inches
- W = 4.6 inches
- H = 1.2inches

Warranty

- 1 Year

1 Maximum wireless signal rate derived from IEEE Standard 802.11a, 802.11g, and Draft 802.11n specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. Environmental factors will adversely affect wireless signal range.

2 Frequency Range varies depending on country's regulation

3 The DIR-825 does not include 5.25-5.35GHz & 5.47-5.725GHz in some regions.